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International Student Participation in Postsecondary U.S. English Language Programs

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INTERNATIONAL STUDENT PARTICIPATION IN POSTSECONDARY U.S. ENGLISH LANGUAGE PROGRAMS

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

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Abstract

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Postsecondary English language education is a growing industry in the United States. While there has been considerable research on international student mobility in higher education, there is limited research on the population's participation in U.S. English language programs (ELPs). The purpose of the study was to apply existing theories and data analysis to understand postsecondary English language program participation and create a foundation for future studies. This exploratory study examined the characteristics of international students enrolled in U.S. postsecondary ELPs. The researcher investigated the relationship between ELP enrollment with U.S. higher education enrollment as well as the relationship between ELP enrollment by destination location, ELP provider type, gender and country of origin. Finally, the researcher analyzed the completion rate of international students in U.S. postsecondary ELPs by gender and country of origin. Data from 2004-2014 were collected from the Student and Exchange Visitor Information System and the Institute of International Education's *Open Doors Report*. Data analysis was conducted through quantitative methods. Findings of this study may help educators reflect on the form and function of current English language programs to improve the quality of future ELPs.

Keywords: international student mobility, ESL, English language programs, enrollment

CHAPTER 1

Introduction

Lawyer, educator, and president of Columbia University, Lee Bollinger, made a passionate plea for diversity in all of higher education (Bollinger, 2003). He contended that cultural diversity in higher education gives students the opportunity to understand the views of others and realize how life experiences shape their own identity, which fosters learning and an environment of compassion (Bollinger, 2003). Supporting the international student community expands the U.S. knowledge base, promotes U.S. foreign policy, and contributes to the U.S. economy (NAFSA, 2006). Higher education has been one of the fifth largest service exports for the U.S., with global demand outreaching the supply (Bhandari & Blumenthal, 2011; Chow & Bhandari, 2009). In 2016/17, the number of international students in U.S. institutions of higher education reached a record high (Institute of International Education, 2017). Among the 1,078,822 international students, 86,786 were enrolled in intensive English programs (IEP) (Institute of International Education, 2017). Postsecondary English language programs (ELPs) help speakers of other languages develop the language and cultural skills needed to succeed in college-level coursework (Hodara, 2015). For students with limited English proficiency (LEP), these programs are often a required intermediary prior to full admittance to a U.S. institution of higher education (Dehghanpisheh, 1987). The number of international students in ELPs is "enormous and still growing" (Pennington & Hoekje, 2010, p. 8). However, there is limited literature on international student participation in U.S. ELPs. Given the limitation, this exploratory study describes the topography of international student participation in ELPs from 2004-2014 through a comparison of international student enrollment in U.S. postsecondary ELPs and U.S. higher education enrollment; ELP enrollment by destination location, ELP provider

type, gender, and country of origin; and the completion rate of international students in U.S. postsecondary ELPs by gender and country of origin.

Overview of the Study

The researcher examined international student participation in U.S. postsecondary ELPs through a secondary analysis of data from Student and Exchange Visitor Information System (SEVIS) and the Institute of International Education's *Open Doors Report* from 2004-2014. Based on relevant literature, a concept map was developed to depict the various elements or possible influencers surrounding international student participation in U.S. postsecondary ELPs. The data sources were used to investigate select elements in the concept map. The concept map was referenced throughout the study to maintain focus during the exploration and to ground the study in theory. The investigation began with a description of the characteristics of international students enrolled in U.S. postsecondary ELPs. The study continued with a comparison of international student enrollment in U.S. postsecondary ELPs and U.S. higher education enrollment from 2004-2014. Next, the researcher examined international student enrollment in U.S. ELPs by destination location, ELP provider type, gender and country of origin from 2004-2014. The research concluded with an analysis of the completion rates of international students in U.S. postsecondary ELPs by gender and country of origin from 2004-2014. Distributions, correlations, and changes by year were considered. The results of this exploration were used in a theoretical discussion of the implications for the field of English language instruction to guide future studies.

Rationale for the Study

The increasing limited English speaking population in the U.S. and the growing demand for postsecondary education by international students makes English language education an

important area to examine. As organizations turn their attention to educating LEP students, questions regarding student needs, instructional methodology, and program structure become important considerations. However, these concepts cannot be effectively qualified without understanding the LEP student population and their participation in U.S. higher education. In merging theories on higher education enrollment, international student mobility, and global English language acquisition, this study is situated in current discourse to navigate the exploration into international student participation in U.S. postsecondary ELPs. Viewing international student enrollment in U.S. postsecondary ELPs in the context of U.S. higher education enrollment gives a picture of the distribution of international students in U.S. postsecondary institutions, change in enrollment over time, and whether a change in enrollment of one group relates to a change in another. The investigation into international student enrollment in U.S. postsecondary ELPs by destination location, ELP provider type, gender, and country of origin illustrates the demographics of students and ELP characteristics. Presenting completion rates of international students in U.S. postsecondary ELPs by gender and countries of origin examines popular held beliefs of the demographics of students that complete ELPs and creates a basis for future studies to research the effectiveness of ELPs. For ELP practitioners, these data could aid in the construction of realistic enrollment goals, inform the allocation of resources, and support the creation of strategic plans. As an exploratory study, this research creates a foundation for future studies to establish research goals, generate hypotheses, and design appropriate research methods.

Brief Overview of the Literature

A detailed keyword search yielded limited published literature on international student participation in U.S. postsecondary ELPs. The proprietary nature of the postsecondary language

education industry may contribute to the limited literature in this area. Additionally, the limitation may be an indication that the field is still evolving in practice, allowing little opportunity for reflection. By drawing on literature in related fields of international student mobility, global English language acquisition, student enrollment preferences, and ELP student success, the study can be situated in past research and further examined through established frameworks. International student mobility describes the motivation to study outside one's home-country; global English language acquisition addresses the interest in learning English; student enrollment preferences depicts the student's ELP selection process; and ELP student success considers the value of ELPs.

International student mobility. The phenomenon of international student mobility, defined as the "act of crossing national borders for the purpose of academic study" (Kelo, Teichler, & Wächter, 2006, p. 5), has been examined by numerous researchers (Bhandari & Blumenthal, 2011; McMahon, 1992). McMahon (1992) explored the relationship between international student mobility with global politics, economics, and culture. She presented a conceptual framework that highlights *push* and *pull* factors to account for mobility. The *push* relates to the politics, economy, and culture of the international student's home-country and the *pull* relates to the same factors in the destination country which encourage student mobility. McMahon used a multiple regression analysis to examine the flow of international students from eighteen developing countries. The results identified economic, educational, and political factors influenced mobility patterns. She stressed the importance of understanding historical factors for mobility in conceptualizing the mobility trends of today.

Global English language acquisition. Kachru (1986), arguably considered one of the foremost scholars in the field of international English education, provided an account of the

spread of the English language through a historical context and advocates for the recognition of institutionalized non-native varieties of English. The author conceptualized global English language acquisition, or the spread of the English language globally, using a model of three concentric circles. In the *inner* circle are countries with English as the primary language (e.g. Australia, Canada, the United Kingdom and the U.S.). In the *outer* circle are countries that spread English through colonization, and view English as a second language (e.g. India, Singapore, Nigeria, and Papua New Guinea). In the *expanding* circle are countries in which English is spreading rapidly and viewed as a foreign language (e.g. China and countries of the former Soviet Union). He went on to describe the history and resulting tensions of the *Englishes* within and between each circle. Kachru focused his argument on the outer circle, discussing the theoretical, applied, societal, and ideological issues associated with institutionalized non-native varieties of English in multicultural settings. He advocated for the recognition of localized varieties of English and argued against those who would consider grammatical and pragmatic differences in local, non-native varieties of English as errors or deficiencies.

From a different perspective, Appadurai (1996) viewed global English language acquisition through a series of *scapes* and *flows*. *Scapes* being the elements- people, media, technology, ideas, and money that create constructed realities or shared perceptions of the world. *Flows* are described as the movement of these elements from one place to another creating an interchange of thought in a cultural economy. Appadurai stipulates the value of the English language is captured and shaped by these *flows* and *scapes*.

Enrollment preferences of students. While international student mobility describes the motivation to learn outside of one's country and global English language acquisition addresses a student's desire to learn English, enrollment preferences of students describe the decision

making process associated with selecting a school. Kotler (1976) explained school selection in a seven-stage process from the decision to attend college to registration. Chapman (1981) built on these stages by theorizing factors that influence the student's decisions. Litten (1982) expanded Chapman's work by categorizing factors, then testing the model using data from previous studies. Litten's model suggests that the aspiration to attend college relates to the student's background, personal attributes, high school attributes, and environment. The student's aspirations lead to the decision to start the application process by gathering information. At this stage the student receives information from potential colleges and is influenced by parents, counselors, peers, publications, and other media. Litten identifies the school's price, size, programs, and ambience as factors which contribute to the decision to apply to a given college. The model concludes with the college's admissions practices and the student's enrollment. Jones (2013) applied principles of enrollment preferences in a dissertation on the influence of marketing factors on selection of U.S. postsecondary ELPs. Jones surveyed 335 students from ten language schools to determine student preferences towards various marketing techniques by the student's country of origin, age, and gender. The results suggested generational differences-- younger students valued the opinions of education brokers, while word-of-mouth rated higher as the age group of students increased. Most marketing factors were viewed equally between males and females, except mailed brochures and blogs rated slightly higher for female students.

ELP student success. Student success as it relates to U.S. postsecondary ELPs is a fairly unexamined topic. Bers (1994) researched the GPA, credit completion, and persistence of LEP students in community college. The results of a mutivariate statistical analysis indicated no statistically significant difference between LEP students and non- LEP students in GPA, credit

completion, and persistence. Hodara (2015) compared students in U.S. postsecondary ELPs with students in developmental writing programs through a longitudinal examination of student transcripts. Through a difference-in-difference approach, results indicated the longer sequenced ELP, as compared to the developmental writing programs, inhibits LEP student progression to credit-bearing college-level courses.

Gaps in the Literature. Although numerous authors touch on issues that affect international student participation in ELPs, no one author addresses the phenomenon directly creating a lack of literature that provides a means of understanding international student participation in ELPs. McMahon's (1992) account of international student mobility does not include participation in ELPs. Kachru's (1986) and Appadurai's (1996) discussion on global English language acquisition focuses on the motivations for language acquisition or language resistance, but not how the motivations influence international students and ELPs. Jones (2013) connected international student mobility and ELPs in his dissertation on preferences towards marketing strategies in ELP selection. However, focusing solely on program marketing, Jones' dissertation does not address international student participation as a whole. Despite an increase of international students in the U.S. and growth in the limited English proficiency population, there is limited literature on the impact of ELPs on student achievement. The proposed study takes a step towards understanding international student participation in ELPs by exploring possible correlations and differences between various characteristics. The results of this study help identify variables that relate to ELPs for future research in this area.

Research Questions

1. What are the characteristics of international student enrollment in U.S. postsecondary ELPs from 2004-2014?
2. What is the relationship between international student enrollment in U.S. postsecondary ELPs by U.S. higher education enrollment from 2004-2014?
3. What is the relationship between international student enrollment in U.S. postsecondary ELPs by destination location, ELP provider type, gender, and country of origin from 2004-2014?
4. What is the difference in the completion rate of international students in U.S. postsecondary ELPs by gender and country of origin from 2004-2014?

Design and Methods

This study employed a non-experimental, exploratory design with quantitative research methods using archival data from 2004-2014 to investigate international student participation in U.S. postsecondary ELPs. The primary data source is SEVIS, a web-based program that stores F visa information on all international students attending schools in the U.S. and accreditation applications information for SEVP certified schools (Student and Exchange Visitor Program, 2015). Information from the *Open Doors Report,* published by Institute of International Education (IIE), was also considered. The data contain school-level variables on program type, ELP provider type, location, SEVP certification, enrollment, and program completion; and student-level variables on country of origin and gender. The researcher used correlative statistical analysis and an analysis of variance to explore relationships and differences between variables.

Definition of Terms

Academic English: The oral, written, auditory, and visual language proficiency required to learn effectively in schools and academic programs (Hidden curriculum, 2014).

Certified ELP: An English language program that has met the requirements of the 2010 Accreditation of English Language Programs Acts through SEVP-certification.

English language programs (ELPs): Programs that help speakers of other languages develop English reading, writing, listening, and speaking skills (Martin & Daiute, 2013).

Global English language acquisition: The spread of the English language globally.

Intensive English program (IEP): A program that generally requires 20 to 30 hours of English language instruction per week.

International student: For this study, an international student is a student attending a U.S. institution of higher education on a F1 student visa.

International student mobility: The act of crossing national borders for the purpose of academic study (Kelo, Teichler, & Wächter, 2006, p. 5).

Limited English speakers: A person who is not fluent in the English language, often because English is not their native language.

Postsecondary education: Institutions that provide education opportunities after high school, to include vocational schools, community colleges, and universities.

CHAPTER 2

Review of Literature

Globalization has increased the demand for English language instruction. Many U.S. colleges and universities use intensive English programs to attract international students (Witter, 2014). IBISWorld projects in the next five years the language instruction industry will see increased competition from in-house college programs (Witter, 2014). As institutes of higher education dedicate more time and resources into English language programs (ELPs), it becomes increasingly important to understand the nature of international student participation in postsecondary ELPs for future studies to examine effective program models, public and private programmatic differences, and the value of ELPs.

Methodology of the Literature Review

The literature review process began with an examination of pre-existing literature on the research topic. With little information published about the international student population in the postsecondary English language instructional setting, the topic was divided into five main areas of study; (a) international student mobility, (b) global English language acquisition, (c) enrollment preferences of students, (d) English language programs, and (e) student success post language program. Cumulatively these areas inform concepts that relate to the phenomenon under investigation. Search terms were generated from the thesaurus feature on the *ERIC* database's ed.gov site. Table 1 lists a selection of search terms explored in the review of literature and the peer-reviewed results from the VCU library search engine. The search engine quarries the library's holdings, which exceed 2.3 million volumes, 61,000 serials, and 600,000 ebooks (Lawal, Selinger, & Anderson, 2014). Additionally, the search term were used in Google Scholar and the following databases: *ERIC Proquest*, *Linguistics & Language Behavior*

Abstracts, Library Information Science & Technology Abstracts, Library Literature & Information Science, Academic Search Complete, Business Source Complete, Directory of Open Access Journals, Dissertations & Theses Full Text, and *IBISWorld*. Institutional websites were reviewed for publications related to the research topic, to include: the Department of Homeland Security, National Center for Education Statistics, State Council of Higher Education for Virginia, U.S. Department of Education, LEP.gov, US State Department, Library of Congress, and the Institute of International Education (IIE). An initial screening examined the literature for relevance to the research topic. The collection of relevant sources was evaluated for the timeliness of the information, validity of the author's argument, and credibility of the author. The references of the sources meeting the inclusion criteria were scanned for other possible materials relevant to the research topic and the selection process was repeated.

Table 1

Literature Review Search Terms

Keywords	VCU Libraries Search Results	
international students + enrollment | mobility	145	|387
foreign students + enrollment | mobility	86	|12
student exchange programs enrollment | mobility	19	|5
international educational exchange + enrollment | mobility	14	|56
Nonresident students + enrollment | mobility	9	|0
global | world + English language acquisition	28	|0
world + English language + evolution | dominance	44	|86
global + English language + evolution | dominance	22	|59
spread of the English language		7
international student + postsecondary + enrollment | mobility	1	|1
enrollment trends		3,708
enrollment projections | influences	631	|1,143
postsecondary | higher education + enrollment	439	|5,634
continuing education | proprietary + enrollment	107	|17
adult education | corporate + enrollment	112	|16
international students + university + enrollment | mobility	34	|78
international students + higher education + enrollment | mobility	30	|179
international students + college + enrollment | mobility	28	|22
international students + tertiary + enrollment | mobility	8	|13

international students + continuing education + enrollment | mobility	2	1
international students + adult education + enrollment | mobility	2	0
international students + enrollment + postsecondary + English language programs		0
participation | higher education		0
English for academic purposes		1,064
international students + English for academic purposes		38
English language instruction | programs	57	20
international students + English language instruction | programs	9	8
postsecondary + English language instruction | programs	0	0
English as a | second language programs	22	390
international students + English as a | second language programs	1	8
intensive English language courses		11
international student + intensive English language courses		0
English immersion programs		14
international student + English immersion programs		0
international students + perceptions + English | language programs	2	3
English as a Second language + student | success	131	10
English | language program + success	1	92
student perceptions | beliefs + language programs	11	6

Figure 1. Structure of the Literature Review

The review of literature spans five areas of research to address international student participation in U.S. postsecondary ELPs (see Figure 1). This begins with a profile of international student mobility to capture their impetus to come to the U.S. to learn. International student mobility research is extensive and frames the larger population of interest. To understand the desire to learn English, the literature review goes on to describe global English language acquisition. In continuing the journey from country of origin to U.S. postsecondary ELP, next is an examination of the enrollment preferences of students to understand why

students select one institution over another. Literature on ELPs describes the purposes of various program models and differences in institution types, which impact a student's educational experience upon enrollment. The literature review concludes with an examination of student success as it relates to ELPs.

International Student Mobility

A student leaving home to discover educational opportunities abroad is not a new phenomenon (Guruz, 2011). Throughout medieval Europe, foreigners often accounted for ten percent of student enrollment (Guruz, 2011). In more modern times, international student mobility has steadily grown since the 1950s (Agarwal & Winkler, 1985). The *Digest of Educational Statistics* (1963) detailed this growth of international student enrollment in U.S. institutions of higher education from 1948 to 1961. In the 1980's researchers began to describe the challenges of international student mobility and expanded the field of inquiry (Heller, 1989; Agarwal & Winkler, 1985; Lee & Tan, 1984). Lee and Tan (1984) examined the flow of international students from developing countries to developed countries. The authors suggested that students seek higher education in developed nations because of excess demand for quality education in developing countries. A regression analysis of numerous variables (e.g. staff-student ratio, real cost per student, per capita income, cost of living, colonial links, English language desirability, etc.) indicated excess demand, cost of living, and quality of education related to student mobility. Lee and Tan argued that developing countries should improve the desirability of their higher education to retain students. With numerous factors influencing international student mobility, this recommendation seems overly simplistic, stipulates causality not proven from the data, and would be challenging for developing countries to implement.

Agarwal and Winkler (1985) investigated the international mobility of students from fifteen developing nations to the U.S. post World War II. In a descriptive study, the authors detailed the migration process, determinants of foreign student flows, origin of students, and financial implications for colleges and universities. Similar to Lee and Tan (1984), Agarwal and Winkler (1985) connected the quality of education in foreign countries to international student mobility. They stated that international mobility declines as U.S. education costs increase and the quality and opportunities of education in developing countries improve-- connecting those factors to international mobility. Agarwal and Winkler (1985) identified the U.S. Department of State's Visa Office; Bureau of Security and Consular Affairs; U.S. Department of Justice, Immigration and Naturalization Service (INS); and the IIE as data sources for information on international student mobility and remarked on the challenges presented by each source. The authors highlighted the challenge of getting complete student counts using INS information is due to how students are categorized and at what point(s) students are counted.

Kelo, Teichler, and Wachter (2006) also argued for improved data on international student mobility, but in Europe. The authors began by describing key findings of the Eurodata study, which consists of the strengths and weakness of international mobility data collection processes, ways to improve processes, and details mobility trends. Kelo, Teichler, and Wachter discussed data on various categories of students, the challenge surrounding the categorization, and the ambiguity of terms. Then they listed the types of missing or erroneous data, which includes not representing various institutional types, misidentifying education level, and counting students twice. They discussed issues with the construct of mobility, posing the question of whether foreign students and study abroad data often misrepresents the concept. Nonetheless,

Kelo, Teichler, and Wachter concluded with an acknowledgement that the data were better than expected.

Heller (1989) discussed the implications of international student mobility on the exchange of knowledge. The author argued that few American students study abroad in countries where there is a need for greater cultural understanding, whereas many international students from a variety of countries come to the U.S to study. According to Heller, this imbalance exchange of knowledge may cause people to worry about the competitiveness of the U.S. in a global marketplace. He promoted the benefits of international student mobility by stating, although not as many American students study abroad, American students learn language and cultural skills from the international students in the U.S. Additionally, when enrollment in U.S. higher education declined, international student enrollment enabled institutions to offer courses that would have otherwise been cancelled. Although the author presented both opposing positions he clearly favored international student mobility. Heller concluded by emphasizing the importance of international exchange in liberal education and in developing international and cultural awareness in American students.

Guruz (2011) contended information and knowledge has played an important role in the ability to improve society. The composition and quality of information [the methods used to create, transmit, and access; workforce based education requirements; and value as a production factor] has led to a *knowledge economy* (Guruz, 2011). In the early twentieth century, institutions of higher education became a means to channel public funds to organize research and development activities toward national goals (Guruz, 2011). Technological advancement, financed by credits and sustained through public-private partnership and innovations, was identified as a main driver in capitalist growth as early as 1934 (Mokyr, 1990). The transition

from an industrial to a knowledge economy with globalization and international student mobility has transformed the higher education landscape while mutually reinforcing one another (Gruz, 2011). Global supply chains and international capital markets depend on the ability of people to communicate in a common language have a shared base of skills and cross cultural competencies (Gruz, 2011). Gruz stated that this has contributed to the internationalization of higher education and has motivated students to study abroad to compete in the global labor market and network with others in their target country to meet future business partners.

***Push-Pull* Model of Mobility**. In the 1990s, a notable means of conceptualizing international student mobility emerged in McMahon's (1992) *Push-Pull* model. The author provided an overview of mobility patterns after World War II focusing on the 1960s and 1970s, when there was an increase of international students from developing countries in five popular developed countries. The study used a multiple regression analysis to examine the flow of international students from eighteen developing countries. The results identified economic, educational, and political factors in both the student's country of origin and the destination country influenced mobility patterns.

Mazzarol and Soutar (2002) used the *push-pull* framework to examine international student selection of country of destination and host institution. The authors argued that social and economic factors in the country of origin *push* students to other countries for higher education. The decision to learn in a particular country, at a given school, relates to *pull* factors. Using native language questionnaires, Mazzarol and Soutar surveyed a convenience sample of 2,485 students from Taiwan, India, China, and Indonesia to understand the influencing factors behind mobility. The results identified eight key factors believed to drive mobility, which spanned the four countries. Mazzarol and Soutar indicated the *push* factors related to the

perceived quality and access to education in the country of origin and a desire to understand "the west" or immigrate permanently. The *pull* factors related to the reputation or familiarity of destination country, the opinions of family members, any social ties to the destination country and cost.

Jones' (2013) used a similar process in his dissertation on the effectiveness of marketing factors on influencing international student choice in U.S. ELP. Jones surveyed 335 students from ten language schools in San Diego, California. On a five-point Likert scale, the students rated the importance of numerous marketing techniques in influencing their selection of a language school. Jones used descriptive statistics, *t* tests and repeated measures ANOVAs to determine the marketing techniques that had the greatest influence by country of origin, age, and gender. The results indicated institutional websites, word-of-mouth, and education brokers (ie. an intermediary who connect students with educational products or services) had a significant impact on decision making, while blogs, posters, and TV commercials had less influence. In addition to institutional websites, word-of-mouth, and education brokers- European students favored mailed brochures; Latin Americans valued information at the U.S. embassy; and Middle Eastern students used English as a Second Language (ESL) directories. The results suggested generational differences-- younger students valued the opinions of education brokers, while word-of-mouth rated higher as the age group of students increased. Most marketing factors were viewed equally between males and females, except mailed brochures and blogs rated slightly higher for females.

Cantwell and Taylor (2013) took the *push-pull* model one step further in an attempt to use local, national, and institutional characteristics to predict the number of international postdocs employed at select universities. The authors argued that the *push-pull* framework for

international student mobility does not account for the total mobility and urged the consideration of the host country's demand for international postdocs. Cantwell and Taylor operationalized their model through an assessment of existing literature and a panel regression analysis of National Science Foundation data from 1989-2009 on 150 U.S. research universities. The results indicated the number of postdocs has increased considerably since the 1980s, postdocs were not evenly distributed among all academic fields, and the average private university employed more postdocs and spent more federal research and development funds than public universities. Although Cantwell and Taylor could not identify a predictor variable using institutional characteristics they identified a 1% increase in federal funding related to a 0.5% increase in the number of postdoc. The authors argued that globalization and time lead to greater employment of international postdocs due to increased demand. This study stands as a testament to the complexity of international student mobility and how trying to make predictions regarding this population is troublesome.

Global English Language Acquisition

While international mobility describes the movement of students to the U.S., global English language acquisition describes the inclination to study English. The popularity of the English language in the U.S. and internationally is a complex phenomenon. The Articles of the Confederation and the Constitution intentionally did not establish English as the official national language (Benesch, 1991). Throughout the 1800s, many cultural groups established schools to preserve their culture and language, the largest being German (Benesch, 1991). Individuals living in acquired or conquered territories, such as the Louisiana Purchase, were allowed to maintain their native language (Benesch, 1991). However, in the mid-nineteenth century descendants of the English settlers generated language restriction policies as they felt large-scale

immigration threatened their culture (Benesch, 1991). This started a wave of Americanization practices and English-language education. U.S. territories were required to use English in schools and some states declared English as the "required language of public affairs" (Benesch, 1991, p.13). In 1906, the Bureau of Immigration and Naturalization was established and English language ability became a requirement for citizenship (Young, 2008). The YMCA began promoting workplace ESL classes, the Daughters and Sons of the American Revolution distributed pamphlets tying learning English to good citizenship, and community-based programs advertised ESL classes to men desiring American citizenship (Young, 2008). Ethnic-based organizations emerged, aiding assimilation efforts through language training (Young, 2008). In the 1920s, The Ford Motor Company held English classes for non-English speaking employees, which was emblematic of the popularity of ESL classes in factories (Young, 2008; Leiserson, 1971). Congress placed caps on the number of visas issued annually and World War I sparked anti-German language laws in many states (Benesch, 1991). It was not until a 1923 Supreme-Court ruling in Myer v. Nebraska, which stated, "the protection of the Constitution extends to all, to those who speak other languages as well as those born with English on the tongue", that the nation began to protect the rights of speakers of languages other than English (as cited by Benesch, 1991, p. 11). In 1970, amendments to the Adult Education Act expanded federal funding to include adult ESL classes (Young, 2008). A 1974 Supreme Court ruling in Lau v. Nichols and the Equal Education Opportunity Act required schools to take action to "overcome language barriers that may impede equal participation" (Benesch, 1991, p.14). This marked the growth of ESL programs in public schools and bilingual education. In the 1980s, an English-only political movement spread throughout the US and many states declared English the

"official" state language (Tatalovich, 2014). Although the movement lost momentum in the early 1990s, the remnants of the English-only movement live on (Lu, 1998).

Phillipson (1992) described the acquisition of English globally as linguistic imperialism. Linguistic imperialism occurs when the native language of one group is dominated by another language to the extent where the people believe they must speak the foreign language to access education, participate in governance, or belong with the social elite (Phillipson, 1992). Galtung (1980) categorized imperialism in six areas- economic, political, military, communicational, cultural, and social. The author described imperialism in three stages. In the first stage a dominate power colonizes a country. Next the colonizers are replaced by local social elite that speaks the language of the colonizers and are often educated in the colonial country. In the next stage there is no longer a need for the presence of dominating personnel because the control is exercised through technology. Appadurai (1996) explored the cultural effects of globalization through patterns of English language acquisition, discourse on multiculturalism, and ethnic violence. His framework for conceptualizing globalization centers on global *flows* and *scapes* that influence the spread of the English language. Appadurai described influences from people (ethnoscape), media (mediascape), technology (technoscape), ideas and ideology (ideoscape), and money (financescape). The author considered the role of the self and imagination in constructing one's world. Appadurai asserted that the concept of modernity offers people a means to escape traditional conflicts between culture and power, and belonging globally and locally. He described the boundaries between how one's perception of the world influences self-understanding and roles in social institutions, both within and between nations. He stated that the media presents images internationally of popular culture and lifestyles, which affect people's values, beliefs, and perceptions of their world.

Anchimbe (2005) was aligned with Kachru (1986) and Appadurai (1996) in the exploration of the influence of U.S. culture and language on global English language acquisition. The author identified the colonial expansion of the United Kingdom (UK) and the position of U.S. in world politics as notable factors in raising the profile of the English language. He contended World War II positioned the U.S. as a political, economic, and technological superpower, bringing a sense of prestige to the U.S. lifestyle and transferring the role of promoting English language dominance from the U.K. to the U.S. To capture the influences driving the globalization of the English language, Anchimbe developed a model expanding on Kachru's depiction of the *Concentric Circles of English* (see Figure 2). The authors argued, U.S. pop-culture, trade, technology, and tourism, as represented in the media, promotes a perception of prestige, progress, and opportunity. As other countries adopt U.S. culture they tend to subordinate their own heterogeneous identities, leading to a progressively American/English language-centric world and culture. The author then surveyed English speakers in Yaounde, Cameroon on their decision to learn English and exposure to multimedia. Through basic descriptive statistics the results suggest the presence of the American voice in daily life created a cultural preference.

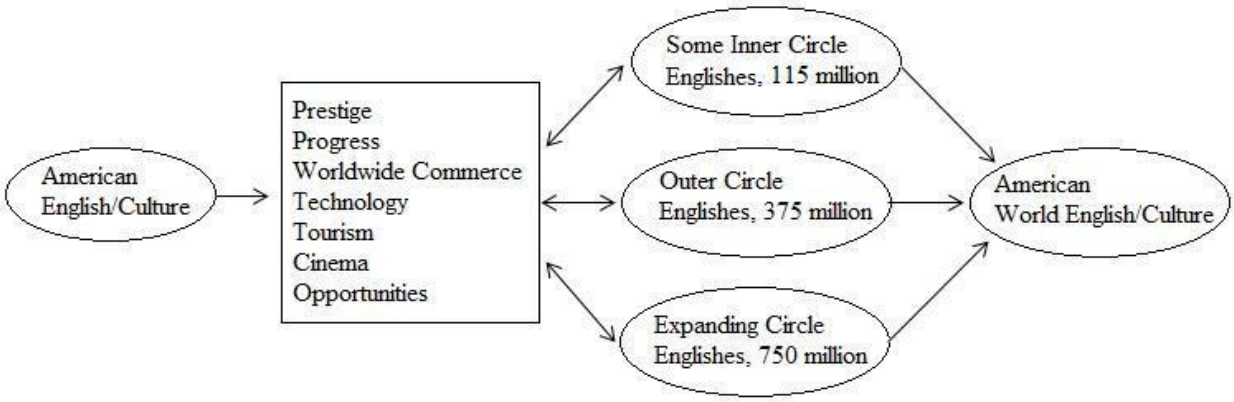


Figure 2. Expanded Concentric Circles of English Model

Lueg and Lueg (2015) drew on the works of Pierre Bourdieu to examine student selection of English as a medium of instruction in Denmark. The authors surveyed non-native English speaking students in two business programs that differed in language of instruction. Through the use of structural equation modeling, the results indicated that students with higher socioeconomic status were more likely to select English as the language of instruction. Students with the lowest socioeconomic status selected against English as the language of instruction because of a fear of failure, although they perceived English language fluency would lead to higher employability.

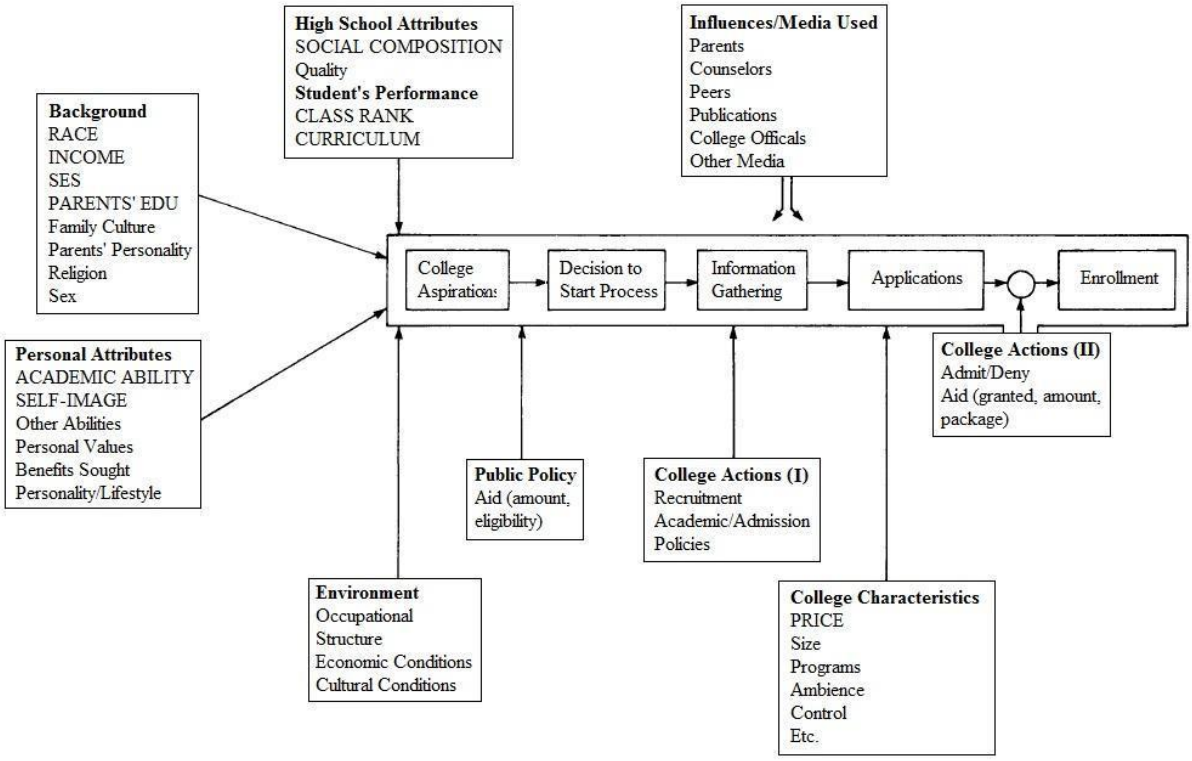
In a case study, Mazak (2007) discussed the acquisition and resistance of the English language by farmers in rural Puerto Rico. She began with an overview of the tensions between Spanish and English as the language of instruction in schools and the island's official language, providing an important historical context. Through a qualitative analysis of interview data, the author detailed the Spanish and English literacy practices of two farmers. The results indicated the participants use English to meet their own needs and on their own terms. The farmers' need generally consisted of acquiring scientific and economic information. As bilingual speakers, the farmers were able to act as language brokers for the non-English speaking residents in the community that largely resisted linguistic imperialism.

In contrast to a reductive view of global English language acquisition, one can interpret the phenomenon through cosmopolitanism. Cosmopolitanism reasons that people have an obligation to have conversations across boundaries to build mutual respect and understanding (Appiah, 1997). Cosmopolitans would then be free from local and national bias by becoming citizens of the world (Appiah, 1997). The international student constructs his/her identity through previous conceptions of the world, current experiences, and future expectations

(Jackson, 2011). The degree to which one's perceptions become more cosmopolitan relates to how the identities intertwine and the amount of critical reflection (Jackson, 2011). Gilroy (2005) postulated that estrangement from one's own culture may move one towards cosmopolitanism and to find beauty in the diversity within sameness. Pollman (2009) argued that a cosmopolitan identity may help one develop the intercultural capital and sense of belonging that is missing in the student's current environment. Viewing global English language acquisition through the lens of imperialism and cosmopolitanism can create a false dichotomy. The motivation to learning English can be influenced by any number or combination of factors, perpetuated by world history, shaped by current events, and manifested in the student's selection of ELP.

Enrollment Preferences of Students

While international student mobility describes the forces driving students to seek education outside their native country and global English acquisition speaks to the decision to learn English, literature on enrollment preference of students addresses the decision-making process leading students to attend a particular institution. Kotler (1976) described seven stages of the college selection process, (1) the decision to attend college, (2) information gathering, (3) inquiries into specific colleges, (4) completing applications, (5) admission offers, (6) college choice, and (7) registration. Litten (1982) built on a model originally created by Chapman (1981), which depicts student and institutional enrollment factors (see Figure 3). To test the expanded model, Litten used data previously collected in three separate studies-- which included a combination of interviews and questionnaires. The results of a *z* score test indicated a difference in the selection process by race, parents' education, geographic location, and gender.



*Capital letters indicate variable which have received substantial research attention

Figure 3. Expanded Student and Institutional Enrollment Factors Model

Long (2004) looks at the role of university cost and quality in student choice using cohorts of high school graduates from 1972, 1982, and 1992. The results of a conditional logistic choice model indicated cost was an important factor for the 1972 cohort, but did not account for the difference in enrollment in 1992. Cost was an important factor in selecting one college over another, especially for low-income students. Quality has increasingly become an important factor in choice of college.

Kim and Gasman (2011) examine the influence of family, friends, teachers and counselors on the decision making process. The researchers interviewed fourteen Asian American students at a private U.S. university. The results indicated that the Asian students in the study considered the opinions of their family and peers as most important, while trying to

accommodate their own opinions. To a lesser degree, students depended on external sources of information (e.g. guidance counselors, marketing materials). According to Kim and Gasman, although the Asian-American students valued their parent's opinions, parents were not able to provide much assistance. This was due to unfamiliarity with the U.S. college application process, limited English language skills, and lack of American social-cultural capital. For these reasons, the authors conclude Asian students often turned to their peers for guidance.

Using data from the National Education Longitudinal Study of 1988 and the Postsecondary Education Transcript Study, Chung (2012) explored whether students enroll in for-profit colleges due to self-selection or external factors (e.g. price, location). The results from a multinomial logit of college choice indicated students self-select into for-profit colleges and that the choice of for-profit college is influenced by community college tuition. The probability of a student choosing a for-profit college is also heavily influenced by the student's socioeconomic background and parental involvement in the student's schooling. Students with higher school absenteeism are more likely to enroll into for-profit college. Finally, the concentration of for-profit colleges in the student's country is important for the choice of for-profit college.

Driven by the national concern over proprietary higher education, Iloh and Tierney (2014) also investigated student choice in attending a for-profit college. The authors examined factors that drive decision making in selecting a for-profit versus community college. Data were collected from 75 students in vocational programs at a for-profit institution and 62 students in a community college. An analysis of interviews, survey, and focus groups indicated student opinions varied by institution type regarding the costs and benefits to their college selection.

English Language Programs

The composition of ELPs in which a student may enroll varies by purpose and ELP provider type. Pennington and Hoekje (2010) discussed leadership in the *ecology* of a language program- *ecology* representing the environment or context of the program. They contended that language programs have a complex and delicate system of connected components, which are constantly evolving. The authors presented their ecological model with leadership theory to aide in program development. Pennington and Hoekje's model consists of *people* (students, faculty and staff), *things* (materials, equipment, records, and physical spaces), and *processes* (learning, hiring, training, record-keeping, budgeting, marketing and recruitment) -- in addition to the typical program components of curriculum and instruction. Program administrators must understand and skillfully work within this ecology (Pennington & Hoekje, 2010). In the ecology of language programs there are arguably two main program purposes and three institutional types.

English for general purposes. English for general purposes or general English is language instruction that provides students with the basic skills needed to function in an English-centric community (Hutchinson & Waters, 1987). Price (2005) regarded learning English as a life skill for LEP adults. She incorporates topics such as, basic greetings, common courtesies, places around town, nutrition, personal health, community services, employment, basic finance, and other cultural competencies in her approach to English for general purposes. General English is often used in Adult Basic Education to form rudimentary literacy skills in LEP adults. Preston (1971) attributed the growth of Adult Basic Education to demand from LEP adults that were unable to function in American society at a self-satisfying level. Hinkel (2013) marked the formation of the National Center for ESL Literacy Education as the time in which

language education for immigrants took a more national approach. Blumenthal (2002) credited the Immigration Reform and Control Act of 1986 for infusing Adult Basic Education ELPs in community college with *amnesty funds.* Hinkel (2013) attributed the synonymous use of the terms *literacy* and *ESL* in Adult Basic Education to the National Literacy Act of 1991. Due to the Workforce Investment Act of 1998, Adult Basic Education ELPs took a more competency-based approach with a vocational skills model to gain funding (Hinkel, 2013).

English for specific purposes. English for specific purposes is an approach to language instruction in which content and methods are based on the student's reason for learning the language (Hutchinson & Waters, 1987). Examples of English for specific purposes include, English for medical professionals, law enforcement, and hospitality/tourism. A popular form of English for specific purposes in postsecondary education is academic English. English for academic purposes focuses on the linguistic skills needed to be successful in a formal academic setting (Benesch, 2001). Benesch (2001) paired English for academic purposes with the concept of critical English. Critical English empowers LEP students to be active participants and engages them in the types of activities typical of an academic setting (Benesch, 2001). Many English for academic purposes programs are taught in an *intensive* format, which generally requires 20 to 30 hours of English language instruction per week (Benesch, 2001). Donohue and Erling (2012) explored the relationship between the use of English for academic purposes and academic attainment. Data were collected from assignment feedback, student interviews, grades, and the diagnostic language assessment procedure, using the Measuring the Academic Skills of University Students (MASUS). A Pearson correlation coefficient indicated a strong relationship between MASUS assessment scores and grades. However, a deeper analysis of the separate

MASUS categories revealed only a relationship between the category *use of source material* and grades.

University Model. Dehghanpisheh (1987) examined the role of ELP in meeting the needs of universities and international students. Data were collected from a survey of 28 postsecondary universities to determine the features of ELPs in higher education, whether the programs meet student needs, and the function of ELPs in admissions. The author classified the ELPs into four models: conservative, traditional, bridging, and progressive. In the conservative model, students who have not passed the TOEFL exam with the required score take non-credit intensive academic English classes prior to university admittance (Dehghanpisheh, 1987). Student meeting the TOEFL requirement gain university admittance and take credit-bearing classes (Dehghanpisheh, 1987). According to Dehghanpisheh (1987), the traditional model builds on the conservative model by adding a third enrollment path-- pre-freshman English course(s) with a regular academic load and conditional admission for students with a low TOEFL score (see Figure 4). In this model the TOEFL score requirements is divided into high score, low score, and very low score. The bridging model replaces pre-freshman English with a sequential semi-intensive academic English courses and a reduced academic load (Dehghanpisheh, 1987). Lastly, the progressive model admits students into the university then sorts them into intensive English, semi-intensive, and freshman English courses based on TOEFL scores-- with the goal of giving students the opportunity to ease into regular academic loads as their language skills improve (Dehghanpisheh, 1987).

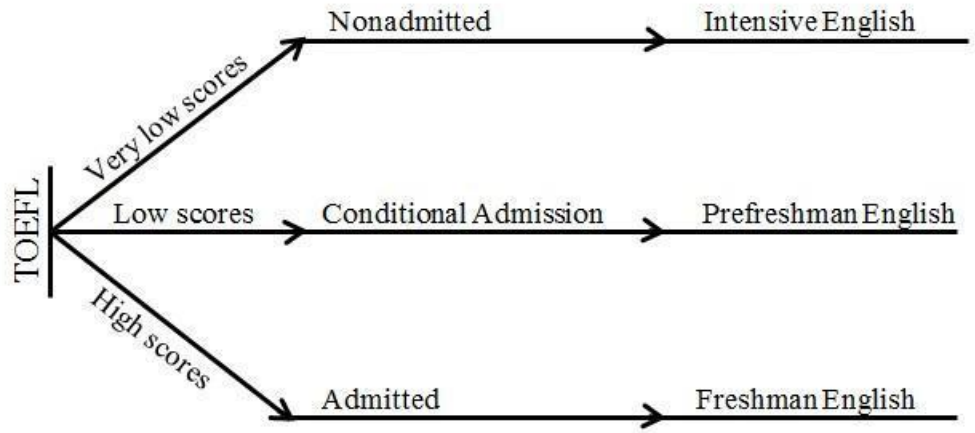


Figure 4. Traditional Model

Community College Model. Blumenthal (2002) pointed out that in 1999 over half of all community colleges offered ELPs with increasing demand for courses. In this model students attend community college ELPs to build language skills to join the workforce, earn an associate degree before joining the workforce, or earn an associate degree before transferring to a four-year university (Blumenthal, 2002). Community colleges also conduct off-site language classes at local businesses for employees (Blumenthal, 2002). Due to the varying reasons for taking an ELP, community colleges often offer English for general, vocational, and academic purpose programs (Blumenthal, 2002). These programs can be situated under English, foreign language, adult education, development education, or as stand-alone departments (Blumenthal, 2002). Since ESL is considered a skill and not a content area, program staff are often instructors (not tenure track faculty), part-time or adjunct with paid-low, and have various levels of qualifications (Blumenthal, 2002).

Corporate Model. Due to the proprietary nature of privately owned ELPs, there is little published literature describing corporate for-profit language programs. As Stieglitz (1955) stated:

> There is more than one reason for the fact that it is very difficult for someone not associated with the Berlitz Schools to obtain a clear picture of the various aspects of the Berlitz Method. Maximilian D. Berlitz never cared to give a detailed description of his method to the larger public. He was content to improve upon it all through his life, and to found new branches of his school system. (p. 300)

Fischer (2008) described private-public partnerships between corporate language providers and universities to provide language instruction for international students. The author highlighted the benefits to these partnerships are profit sharing, larger marketing budgets, and a broader pool of students. The disadvantages included a compromise in academic standards and educational functions. The Navitas ELP model is a yearlong program, usually located on the partner institution's campus. Edith Cowan's ELP recruits students through international education brokers, while the partnering university sets the curriculum, recommends instructors, and monitors student performance. Into University Partnerships splits the labor and cost of ELPs with the partnering university. The university provides their brand and oversight, while the for-profit oversees the marketing. Kaplan's ELP gives international students the opportunity to take select core classes at the partnering university while receiving intensive academic instruction.

In 2010, the Accreditation of English Language Training Program Act, an amendment to the Immigration and Nationality Act, became law-- requiring international students pursuing English language training to enroll in accredited ELPs (gpo.gov, 2010). Labaree (1997) stated that these types of government driven movements for higher academic standards often promise to foster access to the labor market through merit based personal success, yet perpetuate income inequalities. The core aspirations of the U.S. educational system, political equality, social efficiency, and social mobility, often conflict with one another (Labaree, 1997). Educators

compensate for this tension by creating a system of structures that inadvertently reward choice and access (Labaree, 1997). Framed by neoliberal ideals, the relentless pursuit for credentials to gain social advantage and mobility has shifted public education to serve private rather than the public interests (Labaree, 1997). Earning a certificate from a U.S. ELP can be argued as another example of private interests driving education, when international students seek the credential to gain upward mobility or a competitive advantage. Cayuso (2015) briefly discussed the Accreditation of English Language Training Program Act in her dissertation on the relationship between accreditation and ELP assessment standards. In analyzing data from the Commission on English Language Program Accreditation, she found an interaction between accreditation type (programmatic or institutional) and length of accreditation awarded (1 or 5 years); and a relationship between compliance standards and length of accreditation.

Language Programs and Student Success

Although minority student achievement in higher education has been substantively researched, the postsecondary success of students with limited English proficiency (LEP) has received very limited attention by researchers. Bers (1994) examined the success, operationalized as persistence, credits earned, and grade point average (GPA), of LEP students in community colleges. Data were collected from placement tests, course-taking patterns, and grades and compared LEP students with the total student population. Through a multivariate statistical analysis results indicated no statistically significant difference in achievement between LEP students and the total student population, however the validity of the results was limited by clustering factors in the population sample.

Becker (2011) investigated the transitions of adult LEP students from ELPs to mainstream college-level content courses at a community college. Data were collected through

interviews of seventeen LEP students from various socio-economic status (SES), race, and education background. Using Bourdieu's *cultural capital* and a phenomenological design, the author identified themes and shared experiences. These themes connected to the students' SES and level of education in their native countries. Becker contended, LEP students encounter supportive and impeding factors in both their educational program and personal lives. As LEP students begin their educational journey with low cultural capital their access to instructional support and student services is limited. However as students progress and cultural capital increases, students can actualize academic mobility and create a more stable future (see Figure 5).

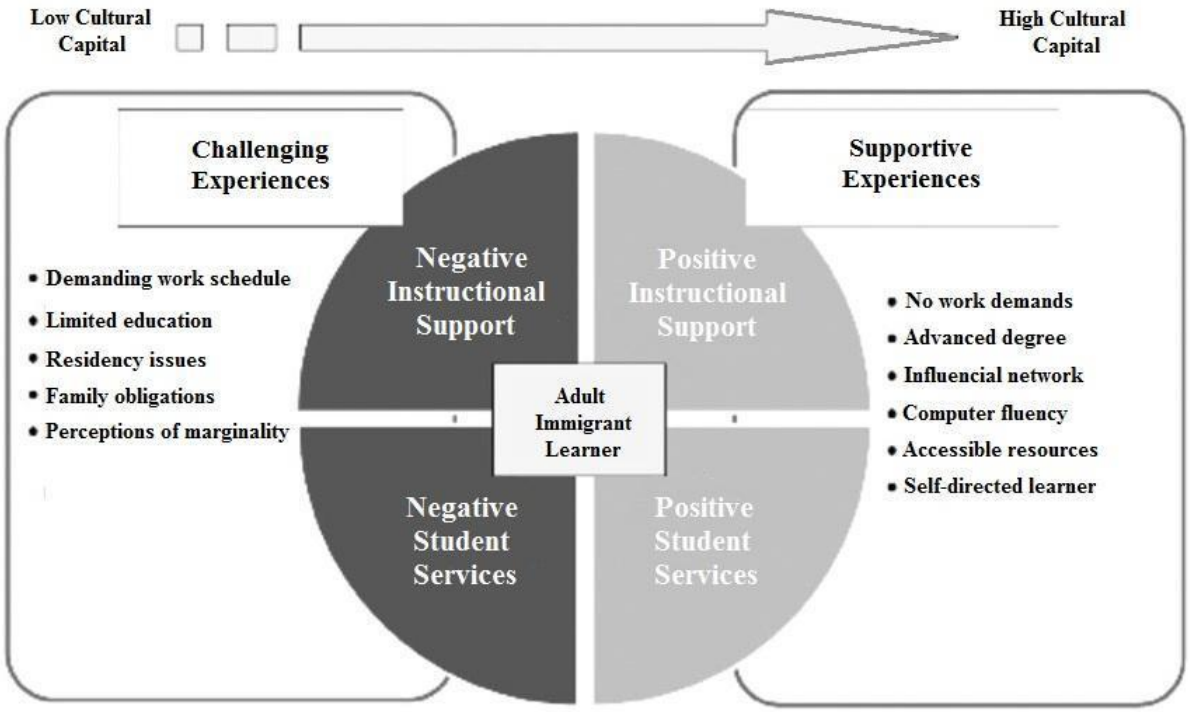


Figure 3. Academic Progress of Adult Immigrant Learners from Noncredit ESL to Credit Programs

Figure 5. Cultural Capital in ELPs

Kim and García (2014) called for more research on the underachievement of long-term LEPs students. To explore this phenomenon, the authors interviewed thirteen long-term LEP students regarding their perceptions of their educational experiences and background, and compared them to the student's program placement, special education referrals, and state mandated standardized exam scores through a document analysis. Using a grounded theory approach, the results indicated students viewed themselves as motivated English-proficient students with a positive, yet challenging educational experience. The researchers also found a gap between the aspirations of students and the actuality of their academic success. Kim and Garcia questioned the adequacy programs and identification of LEP students with disabilities.

In a similar line of inquiry, Hodara (2015) investigated the effects of ELPs with development writing programs on student outcomes, using longitudinal data from ten years of community college student transcripts. Data were analyzed with a difference-in-differences approach. Results indicated the longer sequence of ELPs, as compared to developmental writing program, inhibits minority students from progressing through college. The results for recent immigrants or international students (first generation), U.S. born students (second generation), and foreign-born students who attended high school in the U.S. (generation 1.5) varied.

Summary and Synthesis of Literature Review

The literature on international student mobility describes the *push* and *pull* factors surrounding international student mobility from developing countries to developed and the implications of mobility. Global English language acquisition examines the role of globalizations, colonization, and English dominance in motivating students to learn English. Research on the enrollment preferences of students details the influences which predispose students to selecting one location or institute of higher education over another-- these

include personal attributes, background, media, public policy, college characteristics, and admission practices. Information on ELPs by purpose and ELP provider type describes the various instructional models available to students (English for general and specific purposes) and the differences in program implementation at university, community college, and corporate institutions.

Individually these fields do not address international student participation in U.S. English language programs. Research on international student mobility gathers information on enrollment to U.S. institutes of higher education with limited insights into ELPs. Global English language acquisition accounts for the drive to learn English, but does not address the resulting ELPs. While there is an abundance of literature on college enrollment preferences, there is little information on regarding selection of ELP. There is a need for current and additional research on university and community college program models and great need for information on corporate programs. While research in the effectiveness of English for general and specific purpose is garnering increased attention, additional research is needed to examine the effectiveness of ELPs by institution. Overall the field has failed to address the value of ELPs in student achievement due to the lack of information on the population. However, together these areas of research provide a means of conceptualizing international student participation in U.S. English language programs.

Concept Map

This study consults literature on international student mobility, global English language acquisition, and student enrollment preferences to situate the exploration of international student enrollment in postsecondary ELPs in research from related fields. To create a means to visualize the numerous factors or variables that relate to international student enrollment in postsecondary

ELPs the researcher incorporated Appadurai's (1996) *scapes,* McMahon's (1992) *push-pull* model, and Kachru's (1986) *concentric circles of English* with Litten's (1982) model of the college selection process. The concept map depicts international student participation in postsecondary ELPs from the desire to learn English to program enrollment (see Figure 6). The initial desire to learn English is theorized to be associated with the student's background and outside influences, which predisposes the student to learn either English as a foreign language (EFL) or English as a second language (ESL). The *influences,* (colonization, media, people, technology, ideology, and money) are reflective of Appadurai's *scapes.* Appadurai (1996) argued that the global cultural economy impresses on identity formation, the interpretation of one's world, and the roles in social institutions, both within and between nations. This global cultural economy is comprised of dynamic environments: ethnoscapes- immigration of people; mediascapes- images promulgated by the media; technoscapes- interactions through technology; financescapes- exchange of money; and ideoscapes- transference of ideologies (Appadurai, 1996).

The map goes on to theorize that background and external influences position the student in Kachru's (1986) *concentric circles of English*. In the *inner* circle are countries in which English is the primary language; the *outer* circle includes countries in which English is important historically, used in institutions, and considered a desirable second language; and the *expanding* circle incorporates countries in which English has little historical or institutional importance, but spreads as a foreign language or used as a lingua franca (Kachru, 1986). The inner circle sets English language norms, and the outer circle assimilates the norms, while the expanding circle is dependent on and accommodates norms set by the inner circle (Kachru, 1986). The map proposes that international students from the outer circle are likely to seek English language

instruction from the inner circle, and students from the expanding circle would look to either the inner or outer circle.

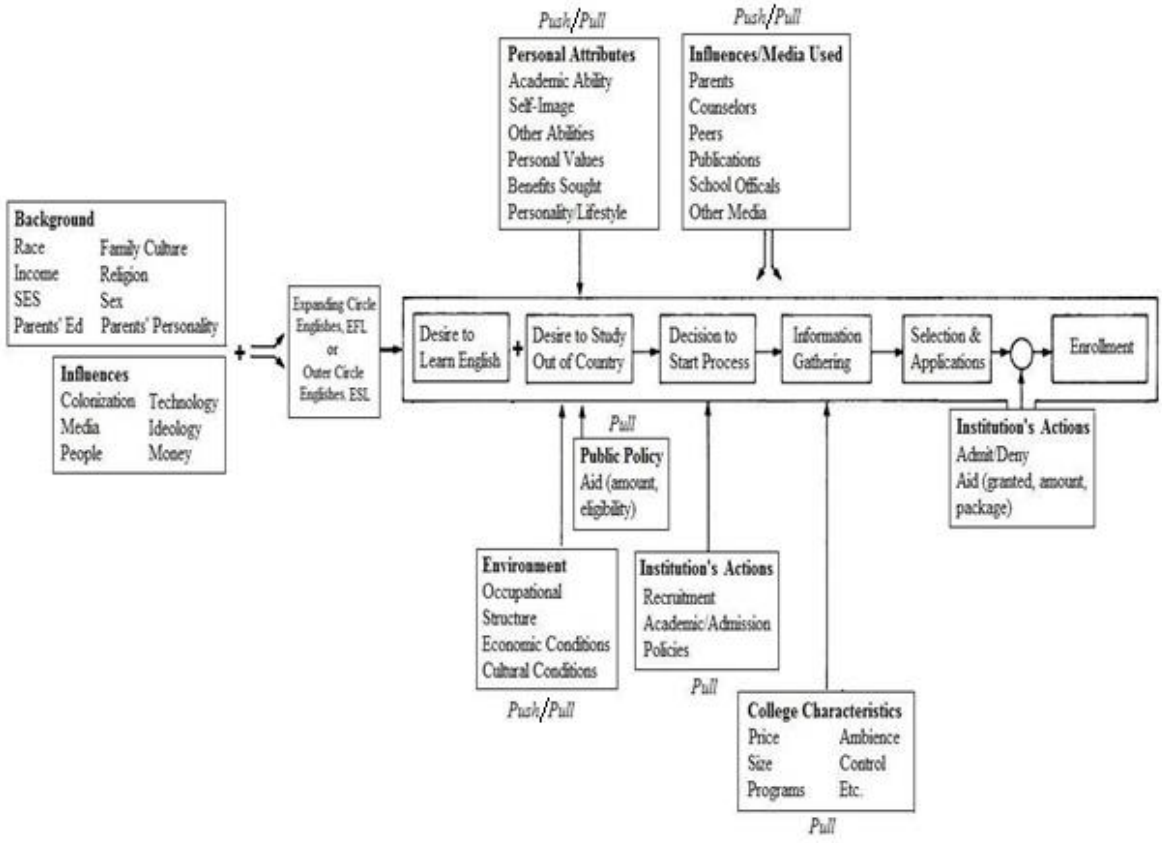


Figure 6. ELP Selection Concept Map

With the disposition to learn English, the international student needs to also have a desire to leave one's country to study abroad. The desire to study outside of one's country relates to personal attributes, public policy and environmental factors, and is best represented by McMahon's (1992) *push* and *pull* model. In this model, McMahon's theories are extended to address the motivations driving students out of their home country and attracting them to certain countries to learn English. These motivations include, the size of the destination country's economy as it relate to the home country, foreign or political relations between the countries,

cultural conditions, and destination country's support of international students (McMahon, 1992). The decision to start the program vetting process is mediated by the student's sphere of influence and prospective institutions, which also have *push* and *pull* elements.

In the information gathering process the student is exposed to various institutional and programmatic characteristics and options within the industry. The next step is followed by the school selection and application process. The map ends with the student's enrollment, pending the institution's admissions decision. The arrows in the map signify the direct connection between elements, but can lead one to believe ELP enrollment practices are a linear process. However, it is argued that enrollment practices are a fluid process, shifting back and forth between stages.

With limited literature on ELP completion, creating a concept map to capture the various factors or variables that relate to program completion rate is challenging. The same factors in the ELP Selection Concept Map (Figure 6) can be used to examine completion rates, however several of the factors may not be applicable while other factors not listed could play an important role. For example, background and personal attributes may theoretically impact ELP completion rate, but college characteristics may not be as important as program characteristics to a student's success. Pending the results of this study, future studies may be able to better speculate the appropriate factors to investigate in understanding ELP completion rates and create a complementary model.

The factors listed in the ELP Selection Concept Map are numerous and complex with multiple sub-constructs, precluding the predictability of student choice. To use this concept map in the investigation of international student participation in postsecondary ELPs, the researcher recommends exploring the factors in manageable parts instead of attempting to represent all

concepts in one study. In representing a number of concepts in one study a researcher risks producing unfocused research that does not address the phenomenon under investigation in meaningful depth. The current study examines selected concepts of the student's background (country of origin and gender) noted at the beginning of the concept map and college characteristics (destination location, ELP provider type) noted near the end. Country of origin, gender, destination location, and ELP provider type were selected for this study because they are quantifiable, have been tracked over time, are available in the marketplace, and represent factors at the beginning and end of the model. With little research in this area the accessibility of information impacts what can be studied. Many of the other factors in the concept map are difficult to codify or have not been measured by any source over time. In order to begin from what is known, this study explores variables that are foundational, which can then be extended and applied to the investigation of more complex factors of student enrollment.

CHAPTER 3

Methodology

This research centers on an exploratory design with a descriptive purpose, using quantitative methods to analyze secondary data. With little research on international students in U.S. postsecondary English language programs (ELPs), an exploratory study is necessary to position the phenomenon into a more precise investigation and develop working hypotheses from an operational perspective. The descriptive purpose of the research is intended to detail the aspects of international student participation in U.S. postsecondary ELPs to generate insights and encourage the development of additional concepts that can be applied to future studies. Quantitative methods complement the exploration of relationships between the anchor variables discussed in the concept map. A secondary analysis of the educational activities of international students from the Student and Exchange Visitor Information System (SEVIS) database was conducted to view international student participation in postsecondary ELPs on a national level. Viewing participation on a national scale helps identify characteristics of the participants as well as the trends of this dynamic phenomenon to increase generalizability and gives researchers the ability to apply what is learned from the current study to investigate their unique international student populations. The study is a first step to understanding the topography of international student participation in U.S. postsecondary ELPs.

Research Questions

1. What are the characteristics of international student enrollment in U.S. postsecondary ELPs from 2004-2014?
2. What is the relationship between international student enrollment in U.S. postsecondary ELPs and U.S. higher education enrollment from 2004-2014?

3. What is the relationship between international student enrollment in U.S. postsecondary ELPs by destination location, ELP provider type, gender, and country of origin from 2004-2014?
4. What is the difference in the completion rate of international students in U.S. postsecondary ELPs by gender and country of origin from 2004-2014?

Data Sources

To address the research questions two primary sources of existing data were used, SEVIS and Institute of International Education (IIE) *Open Doors Report on International Educational Exchange.* SEVIS was used as the primary data source and IIE as a secondary source of additional information. Both SEVIS and IIE collect data on F visa international students, excluding undocumented citizens, resident aliens, and native LEP students. The advantages of using the SEVIS data as a primary source includes the breadth and depth to which SEVIS data represent the target population, the tracking of information overtime, and the required reporting aspect of the data collection. SEVIS data represent student and school-level information on the international student population and ELPs to a greater degree than other agencies, with 1441 reporting ELPs in 2014. In comparison IIE, arguably a leader in international student mobility studies, reports only school-level information and had 333 ELPs represented in their 2014 *Open Doors Reports*- Intensive English Program Survey.

SEVIS. The U.S. Immigration and Customs Enforcement introduced SEVIS in 2002 to replace complicated manual student visa tracking procedures used by law enforcement, with a centralized application to enhance usability, and improve compliance with regulations (Student and Exchange Visitor Program, 2015). SEVIS is the result of a pilot program called, Coordinated Interagency Partnership Regulating International Students, developed by

Immigration & Naturalization Service (INS) in partnership with the State Department, Department of Education, and members of the educational and exchange program community to consolidate student visa and school information (Student and Exchange Visitor Program, 2015).

Data administration. The information collected by SEVIS is not voluntary, but required during the visa application procedure for the student and during the federally mandated certification process for schools seeking to admit international students. According to the Student and Exchange Visitor Program (2015), when an international student gains admission to an institution, the institution notifies SEVIS and the United States Immigration and Naturalization Service (INS) approves the issue of an I-20 visa form. The institution sends the form to the student. The student completes the form and takes it to a U.S. consulate overseas where the information is validated, entered into SEVIS, and a visa is issued. SEVIS is notified when the student enters the U.S. and the institution confirms the student's enrollment in classes, along with additional information and demographics. The institution provides regular updates to SEVIS until the student's departure from the U.S. from both student and institution reported information (see Table 2). Students found in violation of visa requirements are reported to INS through SEVIS.

Table 2

Institution Reported Information to SEVIS

enrollment or failure to enroll
a drop below full course status with prior authorization
change in address or legal name
school transfers
program extension or termination with cause
graduation prior to the date listed on the I-20
change in level of study
employment authorizations
academic or disciplinary actions resulting from criminal conviction

Data accuracy. SEVIS information is susceptible to some error through reporting from the individual and application failures. These failures can include alignment faults, critical section time-outs (deadlocks), and in-page I/O errors. These errors are minimized through a series of validations. Immigration officials review the student's information through the visa application process. Institutions review information submitted by students before submitting it to SEVIS and SEVP administrators review information submitted by institutions and maintain the application. INS audits institutions for compliance with reporting requirements every two years. Institution can lose the ability to admit international students if they fail to comply with federal reporting regulations. SEVP is routinely audited for compliance with regulations. In 2014, SEVIS received technological advancements to improve functionality, in response to what Director of SEVP, Louis Farrell, acknowledges as, "the frustrations users experienced with SEVIS performance late last summer 2013" (Farrell, 2014, p.1). These technical advancements include: improving performance during peak use, standardizing information requirements, validating addresses, and identifying inaccurate data (Farrell, 2014, p.1).

Data elements. In order to obtain access to the SEVIS data a Freedom of Information Act (FOIA) request was submitted to the Department of Homeland Security, U.S. Immigration and Customs Enforcement. The purpose of the study was detailed in the FOIA, along with the requested information. An information security officer, queried and reviewed the requested data and determined portions of one spreadsheet would be withheld pursuant to Exemption 7 (E)-- to protect disclosure of agency codes, secured URLs and systems used in investigations. The agency then provided four spreadsheets of data, which included:

- A list of SEVP certified ELPs by state for 2004-2014, indicating ELP provider type, public or private

- The number of students enrolled in ELPs by school for 2004-2014, indicating country of origin, level of education, and gender
- The number of students completing ELPs by school for 2004-2014, indicating country of origin, level of education, and gender
- The total number of international students enrolled in US institutions by school for 2004-2014, indicating country of origin, level of education, gender

The researcher requested 2004- 2014 SEVIS data arrived in Spring 2015 via U.S. mail on a CD in several Excel spreadsheets. The *ICFO Public Private State* spreadsheet identifies school-level data on 4143 U.S. institutions by state and SEVP certification, allowing the data to be sorted by those two categories. The *ICFO Active ELP* spreadsheet includes enrollment information for 1441 institutions with ELPs and the *ICFO Completed ELP* includes program completion information for 1157 institutions with ELPs by student country of origin (233 for enrollment, 211 completion) and gender, allowing the data to be sorted by student-level characteristics. The *ICFO All Programs* identifies the types of programs offered at 9384 U.S. institution by 254 student countries of origin and gender. This enabled the researcher to organize the information into school level and student-level data for program type. The differences in the number of institutions and student countries of origin reported in the spreadsheets is due to differences in population narrowing down from the total international student population in U.S. institutions to the number of international students in ELPs, and lastly to the number of international students that have completed U.S. ELPs.

IIE. NAFSA Association of International Educators recognizes the *Open Doors survey* produced by IIE as a major data collection efforts on international and study abroad students (Managing Education Abroad: How to Collect & Report Study Abroad Data, 2009). IIE began

annually surveying institutions regarding postsecondary international students in 1949 and introduced the *Open Doors* survey in 1985-86 supported by a grant from the U.S. State Department's Bureau of Educational and Cultural Affairs (Managing Education Abroad: How to Collect & Report Study Abroad Data, 2009).

Data administration. Over the years the survey, categorization of "student", and nature of the data have changed, while some data fields have remained the same (e.g. country of origin, field of study, academic level, and source of financial support) (Agarwal & Winkler, 1985). In an effort to standardize data, the number of students has been adjusted to compensate for changes in response rates and account for non-immigrant foreign students (Agarwal & Winkler, 1985). This process includes excluding categories that received no or low response, grouping students by region to represent smaller territories, and adjusting student counts to subtract reports on non-immigrant foreign students. From 1954 to 1973 the response rate of institutions dropped from 92 to 68 percent, while the number of institutions reporting international student enrollment increased from 62 to 94 percent (Agarwal & Winkler, 1985). In response to the drop in response rates, after 1974 the IIE began soliciting aggregate data in lieu of more detailed student-level data, eliminating many of the cross tabulated data (e.g. country of origin by gender) (Agarwal & Winkler, 1985). Response rates went from 74 percent in 1975 to 98 percent in 1982 (Agarwal & Winkler, 1985). IIE uses codes from other agencies to title their data fields which facilitates the use of multiple sources of data to report on international student activity. The *country of origin* classification is a modified SEVIS category, *field of study* is a National Center for Education Statistics (NCES) category, and *institution type* is from the Carnegie Classification System (Institute of International Education, 2013). IIE uses NCES data collection effort to obtain aggregate U.S. higher education enrollment data, by their internally developed Intensive English

Program Survey for ELP enrollment (Institute of International Education, 2013). The Intensive English Program (IEP) Survey is the portion of the IIE data that relates to international student participation in postsecondary ELPs. IIE administers this survey with the assistance of the American Association of Intensive English Programs (AAIEP) and University and College Intensive English Programs (UCIEP) (Institute of International Education, 2013).

Data accuracy. According to IIE (2013) the totals indicated in the reports are calculated directly from the campus-based survey responses. Campuses that do not maintain detailed records for all variables report estimates. Because of this estimation and rounding percentages, student totals may differ throughout the IIE publications and between tables. Error variation can also be seen when analyzing units representing small numbers of students and when those units are cross-tabulated with other variables.

Data elements. To obtain the IIE data on international students in U.S. ELPs, the researcher contacted the IIE research office. The IEP survey data were requested, however program-level data are not available for public use due to confidentiality assurances (J. Baer, personal communication, November 24, 2015). As an alternative, aggregate published information was provided. The research obtained the complete *Open Doors* series, which includes seven printed volumes from 2009-2010, a compact disc of volumes 1948-2008, and a publication entitled, *Student Mobility and Internationalization of Higher Education: National Policies and Strategies for Six World Regions.* The roughly 145 page *Open Doors* reports have approximately ten pages dedicated to the IEP survey. The IIE *Open Doors* series from 1948-2015 includes:

- ELP student enrollment by ELP provider type, country of origin, and location destination
- Weeks of study by ELP provider type, country of origin, and location destination

- Student intention to continue non-ELP study in the U.S.

To confirm the finding from the SEVIS data, the published data tables in the IIE *Open Doors* annual report will be aggregated for each year to construct a data file. This Excel data file was used to conduct analyses allowing for a comparison to the SEVIS data from 2004-2014.

Definition of Variables

The research questions were formed based on existing research in related areas (e.g. international student mobility) and related variables have been derived from fields in the SEVIS database. The key variables for the study are included in Table 3.

Table 3

Definition of Variables

Variables	Conceptual Definition	Operational Definition	Scale	Source
Time	The period of 365 days starting from the first of January	year (e.g 2009, 2010)	Nominal	SEVIS*/ IIE
ELP student enrollment [DV]	Active visa students enrolled at each ELP at the time of data collection	continuous, count	Interval	SEVIS*/ IIE
ELP student completion	Visa students that have met the ELP's completion standards	count	Interval	SEVIS*
Completion rate [DV]	Calculated from the enrollment and completion numbers of each country for each year	continuous, percentage	Interval	SEVIS
Gender [IV]	A biological distinction	male or female	Nominal	SEVIS*/ IIE
Country of origin [IV]	The location in which the person comes from as indicated on his/her visa.	various (e.g. Mexico)	Nominal	SEVIS*/ IIE

	This differs from the number of politically recognized countries which varies depending upon the source			
ELP provider type [IV]	A distinction between the funding and ownership of the educational organization supporting the ELP	Independent For-Profit, Independent Non-Profit, Private College or University, Public College or University	Nominal	SEVIS/ IIE*
Destination location [IV]	The U.S. location in which the ELP is located and the student studies	state (e.g. Ohio)	Nominal	SEVIS*
U.S. higher education enrollment [IV]	Active students enrolled at U.S. institutes of higher education the time of data collection	count	Interval	IIE*

*indicates primary source for the corresponding variable, DV = dependent variable, IV = independent variable

Data Analysis

The data reported in Excel were imported into IBM SPSS Statistics 24 for analysis. The data were complete based on the data record practices of each agency. This does not mean the data are expected to be error-free. SPSS was used to identify unusual values and outliers and list-wise exclusion made based on the analysis. Institutions were excluded from the study for not having an ELP at the postsecondary, the population of interest. The completion rate by country of origin analysis excluded countries that did not report completion numbers for one or more years- resulting in the exclusion of 22 of 233 countries. Case deletion did not affect the sample due to the size of the sample. See Table 4 for the data source and analysis by research question.

Table 4

Analysis by Data Source

Research Question	Data Source	Analysis
What are the characteristics of international student enrollment in U.S. postsecondary ELPs from 2004-2014?		
Postsecondary ELP enrollment/ completion, higher education enrollment, gender, country of origin, ELP provider type, year	SEVIS, IIE	Descriptive statistics
What is the relationship between international student enrollment in U.S. postsecondary ELPs and U.S. higher education enrollment from 2004-2014?		
International student ELP enrollment, international student enrollment in other U.S. higher education programs, & all other student enrollment U.S. higher education, year	SEVIS, IIE	Pearson product moment correlation
What is the relationship between international student enrollment in U.S. postsecondary ELPs by destination location, ELP provider type, gender, and country of origin from 2004-2014?		
Overall ELP enrollment; ELP enrollment by destination location, ELP provider type, gender, & country of origin, year	SEVIS, IIE	Pearson product moment correlation
What is the difference in the completion rate of international students in U.S. postsecondary ELPs by gender and country of origin from 2004-2014?		
enrollment in ELPs, completion in ELPs, gender, country of origin, year	SEVIS	Welch t-test A (gender), one-way Welch ANOVA (country of origin)

Analysis of data began with a description of international student enrollment characteristics. The research continued with a correlational analysis to examine the relationship between the continuous independent variable of enrollment on the dichotomous and multinomial independent variables (higher education enrollment, gender, locations ELP provider type, and

country of origin). The study concluded with a *t*-test and ANOVA to examine the difference in completion rates by groups (gender and country of origin).

What are the characteristics of international student enrollment in U.S. postsecondary ELPs from 2004-2014?

Descriptive statistics were used to describe the characteristics of international student participation in U.S. postsecondary ELPs. Student enrollment and completion was calculated by year for gender, country of origin, and ELP provider type. Graphs and charts were used to summarize the data.

What is the relationship between international student enrollment in U.S. postsecondary ELPs and U.S. higher education enrollment for 2004-2014?

A bivariate Pearson's correlation was used to examine the relationship between international student enrollment in ELP compared to international student enrollment in other U.S. higher education programs and all other student enrollment U.S. higher education. A bivariate Pearson's correlation is appropriate because the test compares the relationship between two interval paired samples (Neuman, 2005). The purpose of this analysis was to determine if the enrollment numbers of one group relates to the enrollment numbers of the other group. Descriptive statistics were used to represent enrollment numbers and the percent of change over the previous year.

What is the relationship between international student enrollment in U.S. postsecondary ELPs by destination location, ELP provider type, gender, and country of origin from 2004-2014?

A point-biserial correlation, a special case of a Pearson's correlation, was used to explore the relationship between international student enrollment in U.S. postsecondary ELPs and the

dichotomous variable of gender. For the multinomial independent variables (location, ELP provider type, and country of origin) the eta correlation coefficient was used to measure the association and statistical significance. The purpose of this analysis was to determine if the enrollment numbers of one group relates to the enrollment numbers of the other group. Descriptive statistics were used to represent enrollment numbers and the percent of change over the previous year.

What is the difference in the completion rate of international students in U.S. postsecondary ELPs by gender and country of origin from 2004-2014?

Enrollment and completion numbers were calculated by year to create a completion rate for gender and county of origin. A Welch t-test was used to determine if there were differences in international student completion rate of U.S. postsecondary ELPs between males and females due to the assumption of homogeneity of variances being violated, as assessed by Levene's test for equality of variances. A Welch t-test is appropriate because the test determines if two means are significantly different accounting for unequal variance (Neuman, 2005). A one-way Welch ANOVA was conducted to determine if international student completion of U.S. postsecondary ELPs was different by country of origin due to homogeneity of variances was violated, as assessed by Levene's Test of Homogeneity of Variance. A one-way Welch ANOVA is appropriate because the test determines if two means are significantly different accounting for unequal variance (Neuman, 2005). A linear regression was run to understand the effect of country of origin on the completion of U.S. postsecondary ELPs.

Reliability and Validity of Data

The validity of the national SEVIS data depends on institutions and students following the reporting procedures to maintain accurate and current information. Orientations for students,

training for institution staff, and audits help promote consistent reporting. The ELP student enrollment numbers from IIE were lower than SEVIS, because of IIE's survey sample size is smaller than SEVIS's data repository. The *Open Doors* data categories are more general than SEVIS data, reducing the comparison between the two sources. Without an intervention, manipulation of an independent variable or control of extraneous variables, the internal validity of the study will be low and preclude any assertion of causation (Neuman, 2005).

Delimitations

The population of interest in this study is international students seeking education in U.S. ELPs. The study is limited by the nature of the data collected by both SEVIS and IIE representing individuals studying under student visas- this does not represent all limited English speakers in U.S. ELPs. The U.S. has a large population of undocumented citizens, resident aliens, and native LEP students, which are not addressed in the study or represented in the IIE and SEVIS data sources. There are also ELPs that do not focus on serving the international student population and do not process visas applications, these programs are also not represented in the data sources. Another important consideration is that not all international students attend U.S. ELPs. Many international students learn English in their home-country and can successfully gain admissions to U.S. postsecondary institutions. Students who do not meet language admissions requirements are asked to attend an ELP. The purpose in selecting international students for this study is to begin with population that is sufficiently studied at the postsecondary level then bridge into research on lesser examined groups. Future studies could then explore the U.S. native limited English speaking population and make comparisons between the two groups. This creates a foundation for future study that go into greater depth on key issues, like student success, the effectiveness of program models, and institutional differences.

CHAPTER 4

Results

The data were used to produce a descriptive overview of international student participation in U.S. postsecondary ELPs and statistical analysis employed to explore relationships between variables.

The characteristics of international student enrollment in U.S. postsecondary ELPs.

From 2004 to 2014, international student enrollment in U.S. postsecondary ELPs has increased to 30% of international student enrollment in U.S. higher education and 1% of overall student enrollment in U.S. higher education (see Table 5).

Table 5

Percent of International Student Enrollment in U.S. Postsecondary ELPs

	International Students in ELPs	International Students in Higher Edu.	% of ELP International Students	Higher Education Enrollment	% of ELP International Students
2004	119,770	572,509	21	16,911,000	0.70
2005	135,964	562,039	24	17,272,000	0.78
2006	158,845	564,766	28	17,487,000	0.90
2007	182,567	582,984	31	17,672,000	1.03
2008	208,627	623,805	33	18,248,000	1.14
2009	196,079	671,616	29	19,103,000	1.02
2010	207,369	690,923	30	20,428,000	1.01
2011	239,118	723,277	33	20,550,000	1.16
2012	254,395	764,495	33	20,625,000	1.23
2013	254,255	819,644	31	21,253,000	1.19
2014	262,292	886,052	30	21,216,000	1.23

From 2004 to 2014, international students in U.S. postsecondary ELPs have come from 233 countries. The leading ten countries of origin for international student enrollment in U.S. postsecondary ELPs have included: South Korea (510,741); Japan (263,018); Saudi Arabia (258,408); China (140,335); Taiwan (115,258); Brazil (113,689); Thailand (78,707); Turkey (70,208); Columbia (44,046); and Mexico (40,210). From 2004-2011, South Korea was the

leading country of origin in enrollment until Saudi Arabia moved to number one from 2012-2014 (see Figure 7).

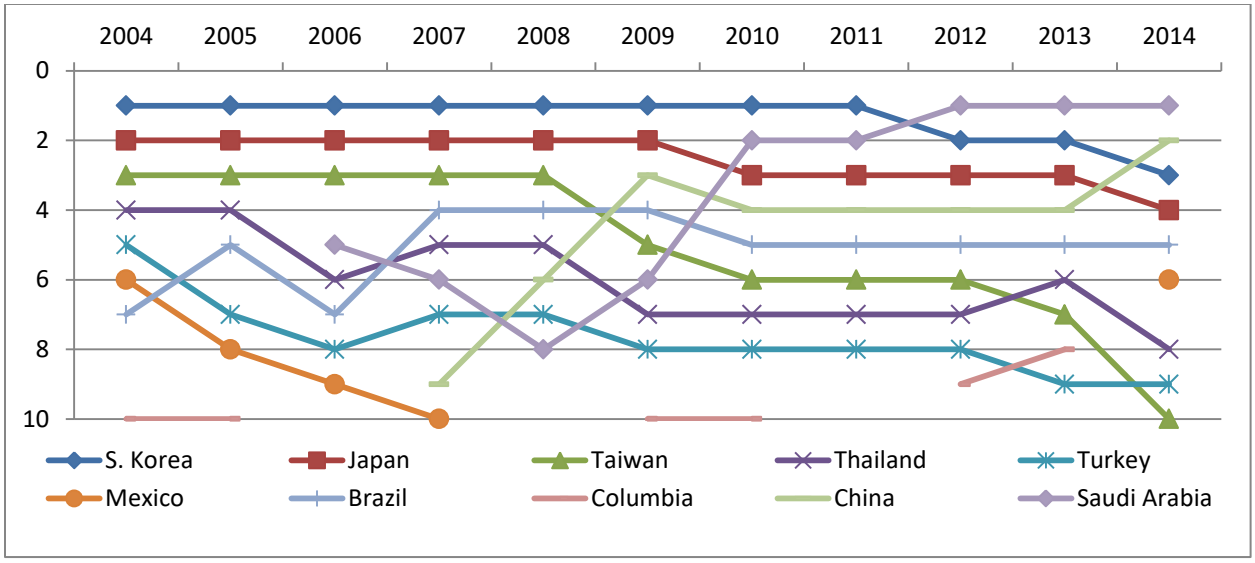


Figure 7. Top 10 Countries of Origin of International Student Enrollment in ELPs

Of the leading ten countries of origin for enrollment in U.S. postsecondary ELPs from 2004 to 2014, the average ELP completion rates by country varied with South Korea 35%; Japan 56%; Saudi Arabia 16%; China 22%; Taiwan 51%; Brazil 65%; Thailand 23%; Turkey 39%; Columbia 57%; and Mexico 69%. Although not a leading country of origin for enrollment, Switzerland had a notable average completion rate of 92% (see Figure 8).

From 2004 to 2009, female international student enrollment in U.S. postsecondary ELPs outnumbered male. In 2009, female enrollment dropped; then male (103,370) and female (103,999) enrollment converged in 2010. In 2011, male enrollment began to surpass female enrollment. From 2004 to 2014, an average of 40% of international students completed ELPs as compared to enrollment and female international student completion of postsecondary ELPs consistently surpassed male (see Figure 9).

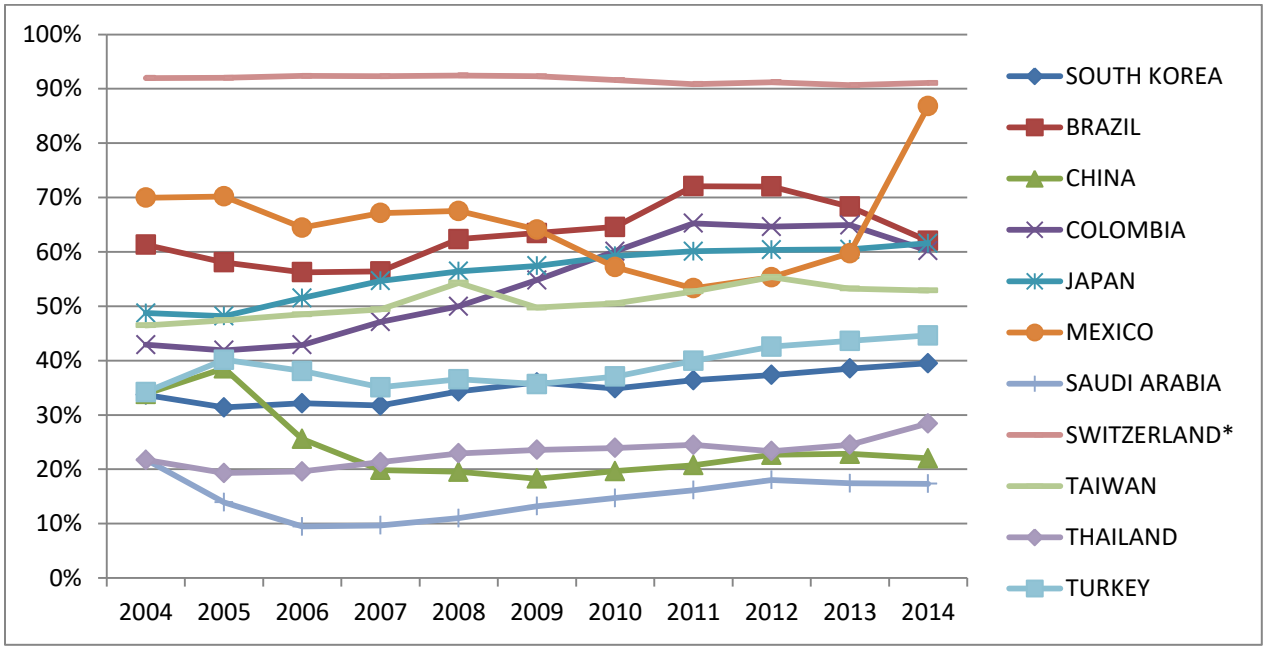


Figure 8. International Student Completion by Country of Origin

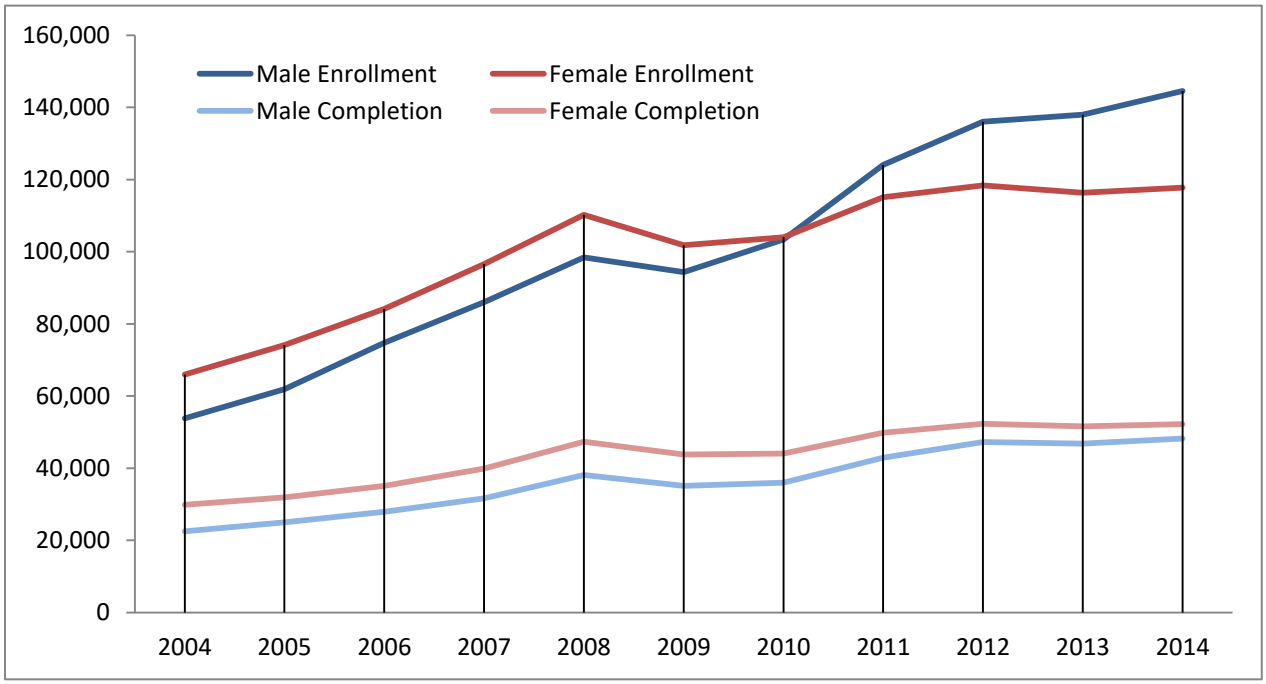


Figure 9: International Student Enrollment and Completion by Gender

From 2004 to 2014, the leading ten destinations for international student enrollment in U.S. postsecondary ELPs have included: California (199,510); New York (67,404); Texas (45,098); Washington (43,687); Pennsylvania (34,412); Massachusetts (33,561); Florida (33,477); Illinois (25,648); Ohio (21,878); and Oregon (21,732). California has been the number one destination from 2004-2014 with Alaska, South Dakota and Maine rounding out the bottom of the list (see Figure 10).

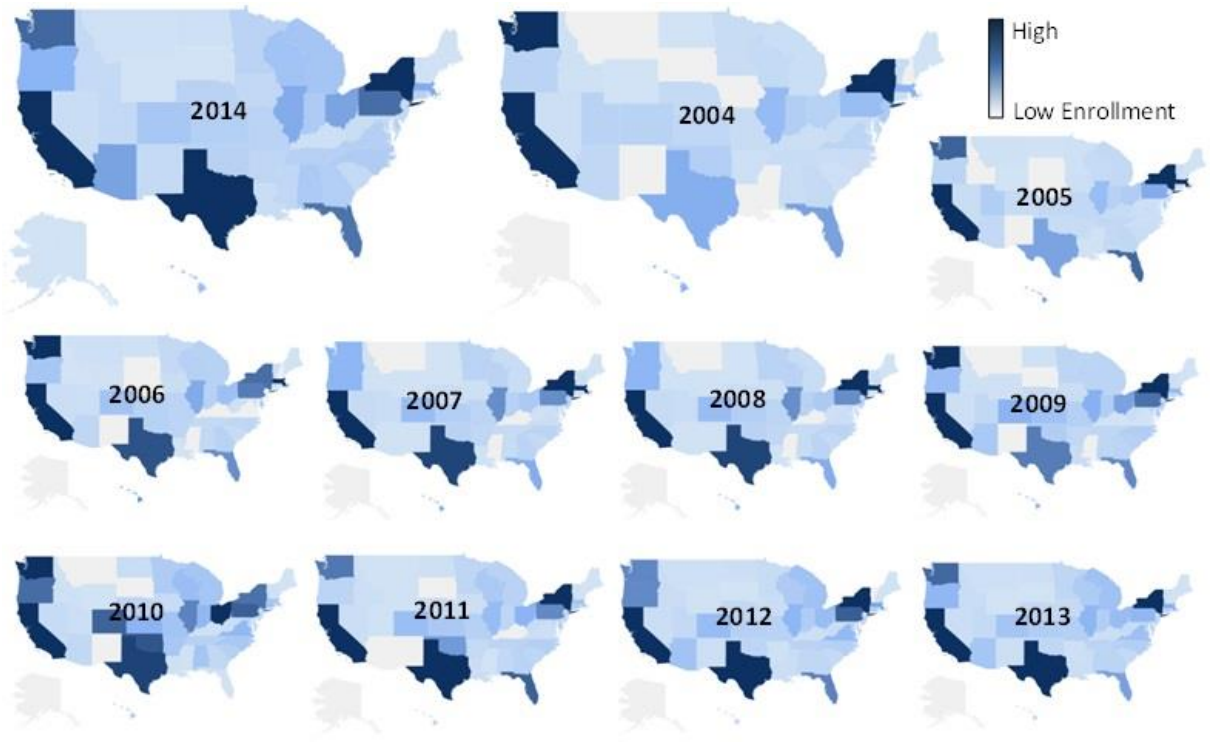


Figure 10. International Student Participation by State

From 2004 to 2014, the states with the highest average number of SEVIS approved ELP providers have included: California (291); North Carolina (136); Virginia (103); Florida (93); Indiana (81); South Carolina (76); Michigan (66); New Mexico (56); Minnesota (51); and Oregon (50). From 2004 to 2013, California, North Carolina, and Virginia maintained the leading three positions for the highest average number of SEVIS approved ELP providers. In

2014, Florida replaced Virginia as the third ranking state. The rate of change for SEVIS approved ELP providers varies by state on average between 0.33% - ¯3.60% from 2004 to 2014.

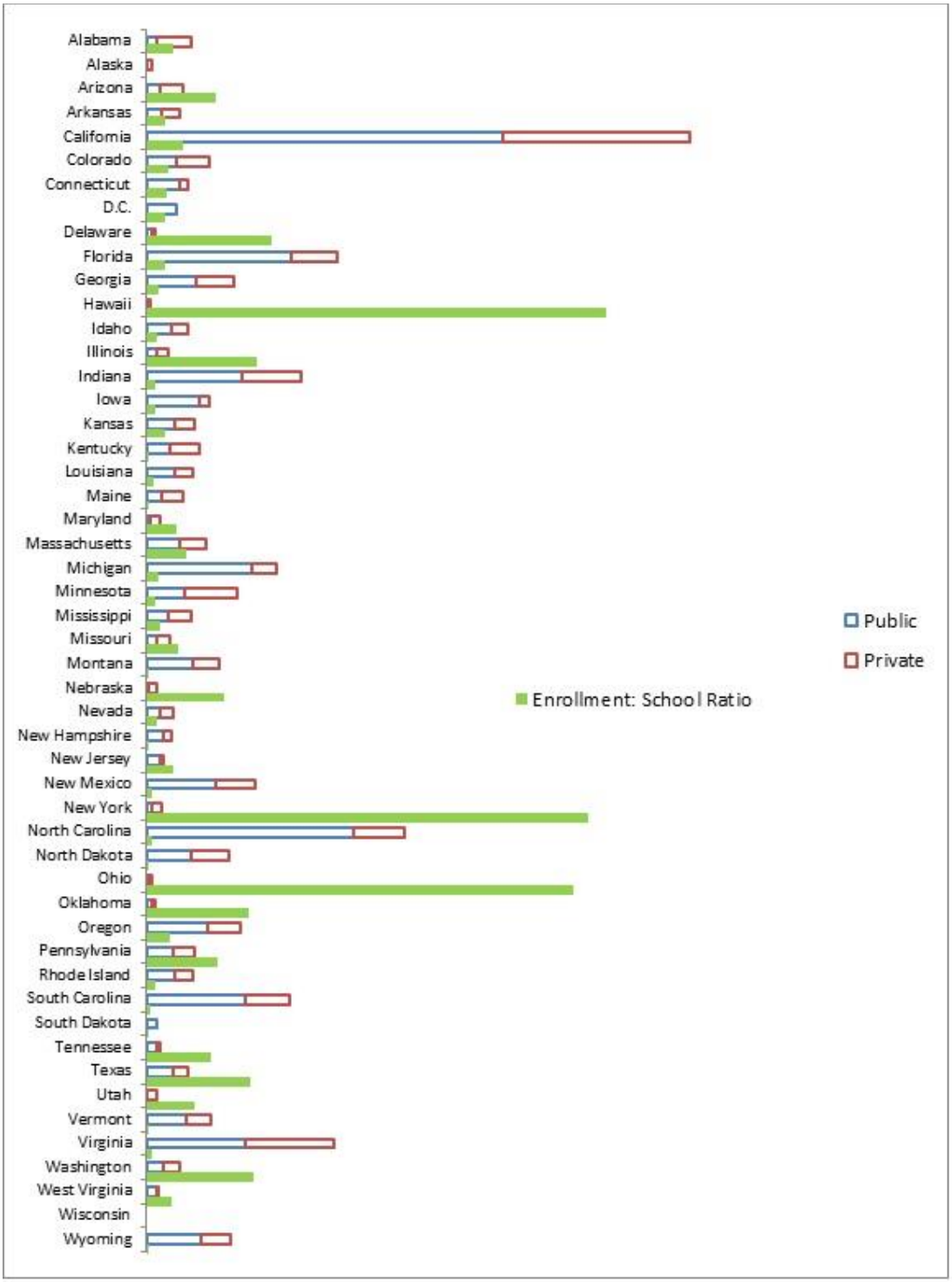


Figure 11. 2014 Public and Private ELP Providers by State

Some states with a high average number of SEVIS approved ELPs providers (California, North Carolina, Virginia, Florida, Indiana, South Carolina, Michigan, New Mexico, Minnesota, and Oregon) had a low enrollment to high provider ratio in 2014; while others (New York, Texas, Washington, Illinois, and Ohio) had a high enrollment to low provider ratio. Overall from 2004 to 2014, there has consistently been more SEVIS approved public ELPs providers than private, although several states (e.g. New York, Minnesota, Kentucky, Arizona and Alabama) had more private providers than public (see Figure 11).

Table 6

Number of U.S. ELPs by Type from 2004-2014

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Independent For-Profit	88	31	60	73	76	80	24	21	86	85	89
Independent Non-Profit	13	9	12	9	10	6	11	9	15	15	18
Private College or University	28	40	34	27	24	30	25	29	46	37	54
Public College or University	65	81	64	69	52	65	74	71	123	97	129
Unspecified	-	-	-	-	-	-	56	57	4	84	43
Total Programs	194	164	170	178	162	181	190	187	274	318	333

In 2008, there were more Independent ELPs than ELPs operated by a College or University; however in all other years there were more College or University ELPs (see Table 6). While College or University ELPs out number Independent, Independent ELPs had on average higher enrollment by number of provider-type, with exceptions in 2004 and 2007 (see Figure 12). Some Colleges and Universities contracted with independent ELPs to provide international students language instruction.

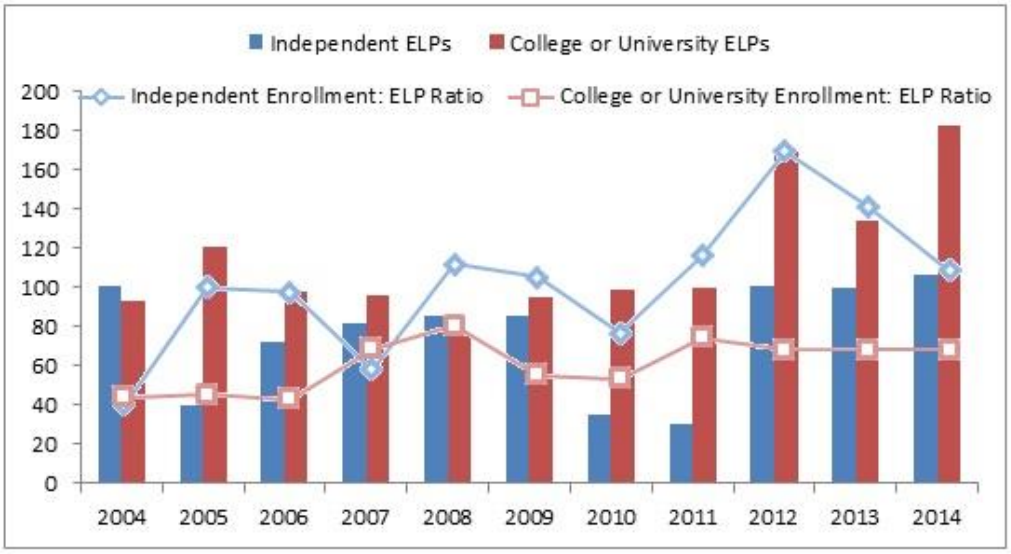


Figure 12. Independent and College or University ELPs

The relationship between international student enrollment in U.S. postsecondary ELPs and U.S. higher education enrollment for 2004-2014.

A Pearson Correlation was used to explore the relationship between international student enrollment in U.S. postsecondary ELPs with international student enrollment in other U.S. higher education programs and all other student enrollment in U.S. higher education from 2004 to 2014. Preliminary analyses showed there were (a) no outliers, as assessed by boxplot; (b) enrollment was normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$); and (c) there was homogeneity of variances, as assessed by Levene's test for equality of variances. Means and standard deviations are presented in Table 7.

Table 7

Descriptive Statistics

	Mean	Std. Deviation	*N*
ELP	201752.82	48947.261	11
OtherInter	476620.82	69615.070	11
HigherEd	18683833.73	1637862.383	11

The results indicate a positive covariance signifying a relationship. A Pearson Correlation of .734 indicates a large effect with a *R* square of .539 for international student enrollment in U.S. postsecondary ELPs and international student enrollment in other U.S. higher education programs. A correlation of .934 indicates a very large effect with a *R* square of .872 for international student enrollment in U.S. postsecondary ELPs and all other student enrollment in U.S. higher education (see Tables 8 and 9).

Table 8

Correlations

		HigherEd	OtherInter
ELP	Pearson Correlation	.934**	.734*
	Sig. (2-tailed)	.000	.010
	Sum of Squares and Cross-products	748497554100.000	25013865850.000
	Covariance	74849755410.000	2501386585.000
	N	11	11
HigherEd	Pearson Correlation		.829**
	Sig. (2-tailed)		.002
	Sum of Squares and Cross-products		945074150400.000
	Covariance		94507415040.000
	N		11
		StudentType	Enrollment
StudentType	Pearson Correlation	1	.868**
	Sig. (2-tailed)		.000
	N	33	33

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 9

Model Summary

Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.934[a]	.872	.857	18480.480
2	.734[a]	.539	.488	35035.673

Table 5

Enrollment and rate of change year over year from 2004-2014

	International Students in ELPs	Change %	International Students in Other Higher Education	Change %	All Other Students in Higher Education	Change %
2004	119,770		452,739		16,458,261	
2005	135,964	13.52	426,075	-5.88	16,845,925	2.35
2006	158,845	16.82	405,921	-4.73	17,081,079	1.39
2007	182,567	14.93	400,417	-1.35	17,271,583	1.11
2008	208,627	14.27	415,178	3.68	17,832,822	3.24
2009	196,079	-6.01	475,537	14.53	18,627,463	4.45
2010	207,369	5.75	483,554	1.68	19,944,446	7.07
2011	239,118	15.3	484,159	0.12	20,065,841	0.60
2012	254,395	6.38	510,100	5.35	20,114,900	0.24
2013	254,255	-0.05	565,389	10.83	20,687,611	2.84
2014	262,292	3.16	623,760	10.3	20,592,240	-0.46

The relationship between international student enrollment in U.S. postsecondary ELPs by destination location, ELP provider type, gender, and country of origin from 2004-2014.

***Destination location*.**

A Pearson Correlation was used to explore the relationship between international student enrollment in U.S. postsecondary ELPs with destination location (state) from 2004 to 2014. Preliminary analyses showed there were (a) no outliers, as assessed by boxplot; (b) enrollment was normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$); and (c) there was

homogeneity of variances, as assessed by Levene's test for equality of variances. Means and standard deviations are presented in Table 10.

Table 10

Descriptive Statistics

	Mean	Std. Deviation	*N*
State	26.00	14.733	561
Enrollment	1393.29	3097.591	561

The results indicate a negative covariance signifying a relationship. A Pearson Correlation of .111 indicates a very small effect with a *R* square of .012 for international student enrollment in U.S. postsecondary ELPs and destination location (see Tables 11 and 12).

Table 11

Correlations

		Sate	Enrollment
State	Pearson Correlation	1	.111**
	Sig. (2-tailed)		.008
	N	561	561

**. Correlation is significant at the 0.01 level (2-tailed).

Table 12

Model Summary

Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.111[a]	.012	.011	3081.137

ELP provider type.

A Pearson Correlation was used to analyze the relationship between international student enrollment in U.S. postsecondary ELPs and the ELP provider type (Independent For-Profit, Independent Non-Profit, Private College or University, Public College or University). Results indicate no statistically significant correlation, $r_{pb}(40) = .095$, p = .540 (see Tables 13 and 14).

Table 13

Descriptive Statistics

	Mean	Std. Deviation	*N*
ProviderType	2.50	1.131	44
Enrollment	15779.82	13052.843	44

Table 14

Correlations

		ProviderType	Enrollment
ProviderType	Pearson Correlation	1	.095
	Sig. (2-tailed)		.540
	N	44	44

Gender.

A Pearson Correlation was used to analyze the relationship between international student enrollment in U.S. postsecondary ELPs and gender. Preliminary analyses showed there were (a) no outliers, as assessed by boxplot; (b) enrollment was normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$); and (c) there was homogeneity of variances, as assessed by Levene's test for equality of variances. Results indicate no statistically significant correlation between international student enrollment in U.S. postsecondary ELPs and gender, $r_{pb}(20) =$ -

.020, p = .931, with higher males enrollment than females (101357.27 ± 31222.377 versus 100395.55 ± 18330.821) (see Tables 15 and 16).

Table 15

Descriptive Statistics

	Mean	Std. Deviation	*N*
Gender	1.50	.512	22
Enrollment	100876.41	24989.183	22

Table 16

Correlations

		Gender	Enrollment
Gender	Pearson Correlation	1	-.020
	Sig. (2-tailed)		.931
	Sum of Squares and Cross-products	5.500	-5289.500
	Covariance	.262	-251.881
	N	22	22

Country of origin.

A Pearson Correlation was used to analyze the relationship between international student enrollment in U.S. postsecondary ELPs and country of origin. Results indicate no statistically significant correlation, $r_{pb}(40) = .046$, $p = .285$ (see Tables 17 and 18).

Table 17

Descriptive Statistics

	Mean	Std. Deviation	*N*
Country	25.50	14.444	550
Enrollment	698.24	2728.702	550

Table 18

Correlations

		Country	Enrollment
Country	Pearson Correlation	1	.046
	Sig. (2-tailed)		.285
	N	550	550

The difference in the completion rate of international students in U.S. postsecondary ELPs by gender and country of origin from 2004-2014.

Gender.

A Welch t-test was used to determine if there were differences in international student completion rate of U.S. postsecondary ELPs between males and females due to the assumption of homogeneity of variances being violated, as assessed by Levene's test for equality of variances (p = .024). There were no outliers in the data, as assessed by inspection of a boxplot, and completion scores for each level of gender were normally distributed, as assessed by Shapiro-Wilk's test (p > .05). The completion rate for male international students in U.S. postsecondary ELPs (36.73 ± 2.72) and female (43.09 ± 1.14), indicates a strong statistically significant difference of -7.17 (95% CI, -8.28 to -4.45), t(13.378) = -7.152, p = .024, d= 3.04 (see Tables 19 and 20).

Table 19

Group Statistics

	Gender	*N*	Mean	Std. Deviation	Std. Error Mean
CompletionRate	Male	11	36.73	2.724	.821
	Female	11	43.09	1.136	.343

Table 20

Independent Samples Test

	Levene's Test for Equality of Variances		*t*-test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig.	*t*	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Upper	Lower
Completion Rate	5.932	.024	-7.152	13.378	.000	-6.364	.890	-8.280	-4.447

Equal variances not assumed

***Country of origin*.**

A one-way Welch ANOVA was conducted to determine if the international student completion rate of U.S. postsecondary ELPs was different by country of origin. There were no outliers and the data was normally distributed for each group, as assessed by boxplot and Shapiro-Wilk test ($p < .05$), respectively. Homogeneity of variances was violated, as assessed by Levene's Test of Homogeneity of Variance ($p = .0005$). Results indicate international student completion rate of U.S. postsecondary ELPs is different by country of origin. Welch's $F(49/50) = 100.857$, $p < .0005$. Games-Howell post hoc analysis revealed that the change in mean was statistically significant ($p = .0005$) (see Table 21-23 and Figure 12).

Table 21

ANOVA

	Sum of Squares	Df	Mean Square	*F*	Sig.
Between Groups	324486.429	49	6622.172	100.857	.000
Within Groups	32829.455	500	65.659		
Total	357315.884	549			

Table 22

Robust Tests of Equality of Means

	Statistic[a]	df1	df2	Sig.
Welch	710.053	49	173.289	.000

a. Asymptotically F distributed.

Table 23

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
7.301	49	500	.000

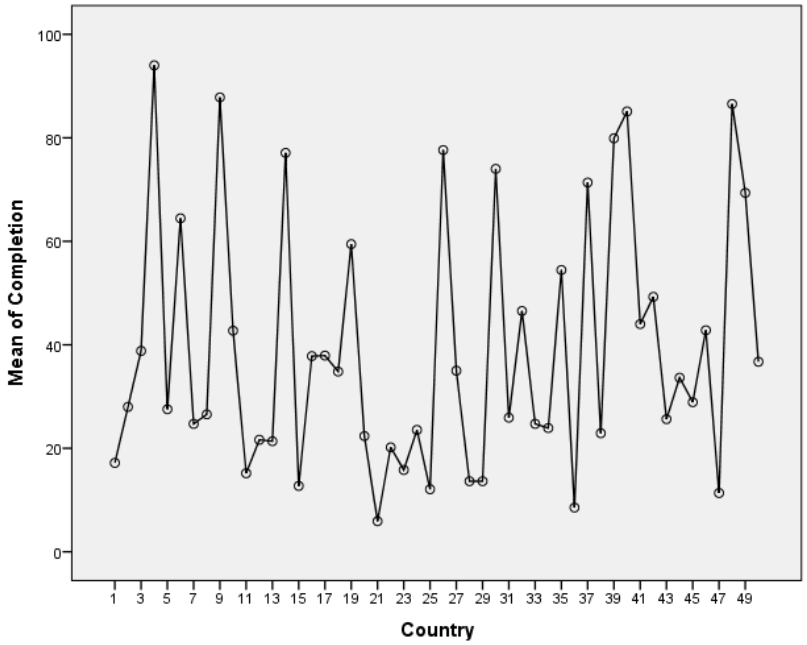


Figure 12. Mean of Completion

A linear regression was used to understand the effect of country of origin on the completion rate of U.S. postsecondary ELPs. To assess linearity a scatterplot of completion rate against country of origin with superimposed regression line was plotted. Visual inspection of these two plots indicated a linear relationship between the variables. There was homoscedasticity and normality of the residuals (see Figure 13).

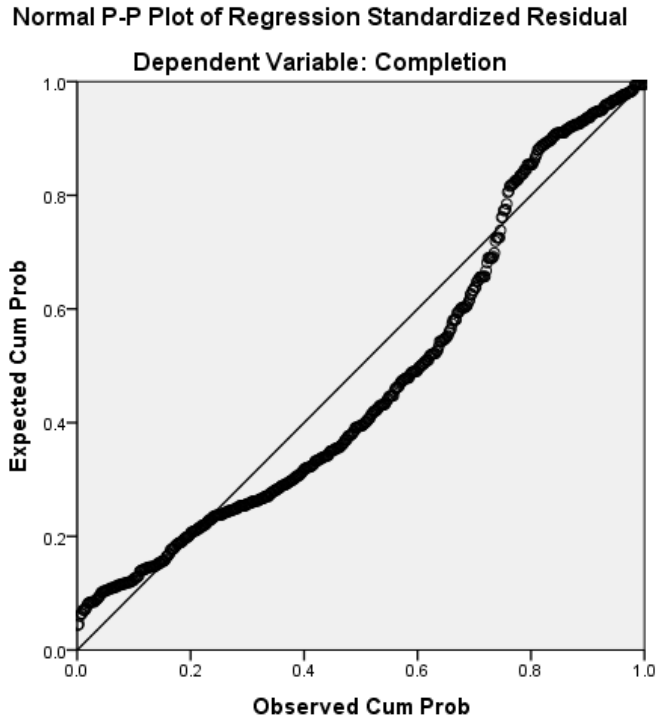


Figure 13. Regression Plot of Completion

Results indicate a statistically significant relationship between country of origin and completion rate, $F(1/548) = 5.526$, $p < .019$, accounting for 1% of the variance in completion rate can be explained by country of origin with adjusted R squared = 0.8%, a small size effect (see Tables 24-26).

Table 24

Model Summary

Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate	Durbin-Watson
1	.100[a]	.010	.008	25.407	.283

a. Predictors: (Constant), Country

b. Dependent Variable: Completion

Table 25

ANOVA

Model		Sum of Squares	Df	Mean Square	*F*	Sig.
1	Regression	3567.088	1	3567.088	5.526	.019[b]
	Residual	353748.795	548	645.527		
	Total	357315.884	549			

a. Dependent Variable: Completion

b. Predictors: (Constant), Country

Table 26

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	*t*	Sig.	Lower Bound	Upper Bound
1	(Constant)	34.605	2.200		15.732	.000	30.285	38.926
	Country	.176	.075	.100	2.351	.019	.029	.324

a. Dependent Variable: Completion

CHAPTER 5

Summary

This research is the first study in a series of anticipated studies on international student participation in U.S. postsecondary English language programs (ELPs). This exploratory study examined the characteristics of international student enrollment in U.S. postsecondary ELPs; the relationship between ELP enrollment with U.S. higher education enrollment; the relationship between ELP enrollment with ELP enrollment by destination state, provider type, gender, and country of origin; and the relationship between international student completion rates of U.S. postsecondary ELPs by gender and country of origin. The researcher examined international student participation in postsecondary ELPs through a secondary analysis of data from Student and Exchange Visitor Information System (SEVIS) and the Institute of International Education's *Open Doors Report* from 2004-2014. The purpose of the study was to apply existing theories and data analysis to better understand participation in U.S. postsecondary ELPs and create a foundation for future studies. From this research, educators can reflect on the form and function of ELPs.

There are several findings from this study that contribute to the current literature on international students and U.S. postsecondary ELPs. The results of a Pearson Correlation indicate a large statistically significant positive relationship between international student enrollment in U.S. postsecondary ELPs with international student enrollment in other U.S. higher education programs and all other student enrollment in U.S. higher education. The results of a Pearson Correlation indicate a small statistically significant relationship between international student enrollment in U.S. postsecondary ELPs with location destination, but no statistically significant relationship with provider type, gender, and country of origin. The results of a Welch

t-test indicate a statistically significant difference of -7.17 in the completion rates of male international students in U.S. postsecondary ELPs when compared to female completion rates. The results of a one-way Welch ANOVA indicate a statistically significant difference between the international student completion rates of U.S. postsecondary ELPs by country of origin. The results of a linear regression indicate 1% of the variance in completion rates can be explained by country of origin. Overall, destination location can be considered to be a minor factor related to international student enrollment in U.S. postsecondary ELPs, while provider type, gender, and country of origin can be excluded. Gender and country of origin can be considered factors related to the international student completion rate of U.S. postsecondary ELPs, with country of origin explaining 1% of the variance in completion rates.

Discussion

ELP enrollment by higher education enrollment.

Viewing international student enrollment in U.S. postsecondary ELPs in the context of U.S. higher education enrollment describes the distribution of international students in U.S. postsecondary ELPs, change in enrollment over time, and relationship of international student enrollment in U.S. postsecondary ELPs with international student enrollment in other U.S. higher education programs, and all other U.S. higher education enrollment. From 2004-2014, international student enrollment in U.S. postsecondary ELPs has increased from approximately 20% to 30% of international student enrollment in U.S. higher education programs. From 2004-2014, international student enrollment in U.S. postsecondary ELPs has remained around 1% of overall U.S. higher education enrollment. From 2004- 2014, the percent of change in ELP enrollment growth has fluctuated between -0.05% and 14.93%. International student enrollment in other U.S. higher education programs declined from 2004- 2007, but then demonstrated

substantial growth in 2009 and 2013. The growth in all other student enrollment in U.S. higher education has varied from -0.46% to 7.07%. Results of a Pearson Correlation indicate a strong positive relationship between international student enrollment in U.S. postsecondary ELPs, international student enrollment in other U.S. higher education programs, and all other student enrollment in U.S. higher education. While researchers may not be surprised by this finding, it is still important to investigate the relationship in future studies. The nature of the relationship between international student enrollment in U.S. postsecondary ELPs, international student enrollment in other U.S. higher education programs, and all other student enrollment in U.S. higher education is difficult to qualify given the numerous variables associated with enrollment for each group and given that each group is experiencing enrollment growth at varying rates. The relationship could indicate the groups share one or more factors that influence enrollment. It could also indicate a change in enrollment in one group could correspond with a change in another group.

For ELP practitioners, these data could inform enrollment projections, the allocation of resources, and creation of strategic plans. Considering international student enrollment in U.S. postsecondary ELPs is approximately 30% of international student enrollment in U.S. higher education and 1% of overall enrollment in U.S. higher education, researchers and ELP practitioners could calculate probable student enrollment in U.S. postsecondary ELPs using a forecast of U.S. higher education enrollment. Forecasting enrollment is beneficial in estimating industry growth, expected revenue, opportunity costs, and resource needs. NAFSA (2016) estimated the economic impact of international students in U.S. postsecondary higher education during the 2016-2017 school year to have been $39.4 billion. With international student enrollment in U.S. postsecondary ELPs accounting for approximately 30% of international

student enrollment in U.S. higher education, the economic impact of U.S. postsecondary ELPs could be 11.8 billion. The assumption being that the data used to calculate economic impact are similar in the sub-group of international student in U.S. postsecondary ELPs. International student enrollment in U.S. postsecondary ELPs comprises approximately 1% of higher education enrollment yet contributes billions of dollars to the U.S. economy. From a fiscal perspective, the international student population in U.S. postsecondary ELPs is important to support with policies, admissions practices, and curriculum development. While overall international student participation in U.S. postsecondary higher education continues to grow, the U.S. market share globally was down from 28% in 2000 to 22% in 2014 due to increasing competition (Institute of International Education, 2017). A continued negative trend could have an impact on U.S. higher education and the economy. In decision making it is important to note there are limitations to the reliability of projections and estimates due to differences between groups, varying enrollment growth rate within each group, and individual ELPs experiencing trends differently than the total population.

The relationship between international student enrollment in U.S. postsecondary ELPs, international student enrollment in other U.S. higher education programs, and all other student enrollment in U.S. higher education may support Gruz's (2011) claim that the transition to a knowledge economy with globalization and international student mobility has transformed the higher education landscape while mutually reinforcing one another. The trend of ELP growth may be an indication of Phillipson's (1992) belief that global English language acquisition is the linguistic imperialism of one group's native language dominating another's to the extent where people believe they must speak the foreign language to access education, participate in governance, or belong with the social elite.

These results also generate additional questions. The most notable question is regarding the nature and strength of the relationship between the groups given that each group is experiencing enrollment growth at different rates. Additionally, does the U.S. government's control over the issuance of F-1 visas contribute to this relationship? What factors or variables could have contributed to the decrease in international student enrollment in U.S. postsecondary ELPs in 2009 and 2013? Do economic and political factors relate to the change in enrollment (e.g. the 2008 financial crisis or 2010 Arab Spring)? What is the estimated economic impact of international student enrollment in U.S. postsecondary ELPs?

ELP enrollment by destination location and ELP provider type.

The exploration of international student enrollment in U.S. postsecondary ELPs by destination state and provider type provides insight into student selection preferences and the possible impact of international student enrollment in U.S. postsecondary ELPs. From 2004-2014, California, Texas and New York remained the leading destination locations for international student enrollment in U.S. postsecondary ELPs. The overall international student enrollment by total number of ELP provider ratio varied from state to state. The results of a Pearson Correlation indicate a small relationship between international student enrollment in U.S. postsecondary ELPs and destination location, but no statistically significant relationship between enrollment and ELP provider type. The results of a follow-up ANOVA on ELP provider type indicate no statistically significant difference between international student enrollment in Public College and Independent For-Profit ELPs from 2004-2014. However, there was a low statistically significant difference between international student enrollment in Independent Non-Profit ELPs with Independent For-Profit and Public College ELPs, as well as, a difference between Private College and Public College. This difference is likely due to the

number of providers in each group. These results may signify that destination location is a factor in international enrollment in U.S. postsecondary ELPs while ELP provider type is not. Although higher education practitioners may perceive recruitment and programmatic distinctions in ELPs by provider type, international students may not understand possible differences or if they do, the differences may not factor into their selection of ELP.

For practitioners, these results could inform marketing practices, the allocation of resources, and the creation of strategic plans. With a small statistically significant correlation between international student enrollment in U.S. postsecondary ELPs and location destination, practitioners may want to highlight location in marketing materials. Data regarding the number of providers and enrollment by state could be used to formulate a business strategy around competition and market saturation. ELP providers may prefer operating in locations with lower ELP provider to higher enrollment ratio (i.e. lower competition for higher demand). According to NAFSA (2016), the economic impact of international student enrollment in California higher education programs was approximately $5,970.7 million and 70,131 total jobs in the 2016-2017 school year. If international student enrollment in postsecondary ELPs accounted for 30% of international student enrollment in California higher education, the economic impact of international student enrollment in California ELPs would be 1,791.2 million and 21,039 jobs. This would also make the international student population in U.S. postsecondary ELPs an important consideration for individual states.

Appadurai (1996) supposition that people's values, beliefs, and perceptions of their world are shaped by images from the media promoting popular culture and lifestyles, may support the selection preferences of international students in U.S. postsecondary ELPs by location destination. However, the results of no statistically significant relationship between international

student enrollment in U.S. postsecondary ELPs with provider type from the current study is contrary to the results of Chung's (2012) study which indicated students self-select into for-profit colleges and that the choice of for-profit colleges is influenced by community college tuition. The disparity in results may be due to differences in methodology, population sampling, and statistical analysis. A future study on the relationship between economic factors (e.g. tuition, social economic status) with international student enrollment in postsecondary ELP would be beneficial.

The results from the current study generate additional questions. What is the nature of the relationship between international student enrollment in U.S. postsecondary ELPs and destination location? Are there common characteristics of destination locations with higher student enrollment (e.g. urban environments, diversity)? Given that there is no statistically significant relationship between international student enrollment in U.S. postsecondary ELPs and ELP provider type, what accounts for the trend higher enrollment averages in Independent ELPs than College and University ELPs? Is there a difference in student recruitment practices or perceptions of the functions of ELPs by provider type?

ELP participation by gender.

The exploration into international student enrollment in U.S. postsecondary ELPs by gender illustrates the demographics of international students in U.S. postsecondary ELPs. Presenting completion rates of international students in U.S. postsecondary ELPs by gender responds to common beliefs about the demographics of students that complete ELPs and creates a basis for future research into the effectiveness of ELPs. In U.S. postsecondary ELPs, female international student enrollment surpassed male enrollment until 2010. In 2011, male enrollment began to surpass female enrollment in U.S. postsecondary ELPs. This is contrary to the trend in

U.S. higher education where female enrollment in 4-year postsecondary institutions has consistently outnumbered male (NCES 2016). Results of a Pearson Correlation indicate no statistically significant relationship between international student enrollment in U.S. postsecondary ELPs and gender. However, the results of a Welch t-test indicate a statistically significant difference of -7.17 in international student completion rates of U.S. postsecondary ELPs for males when compared to females. Female international students in U.S. postsecondary ELPs are completing programs at a higher rate than males. From 2004-2014, the average total completion rate for international students in U.S. postsecondary ELPs was 40%, which is consistent with the graduation rate of U.S. higher education students at 4-year postsecondary institutions (NCES 2016). At 44%, female completion rates of U.S. postsecondary ELPs is also consistent with the female graduation rate of U.S. higher education in 4-year postsecondary institutions (NCES 2016). However, the male completion rate for U.S. postsecondary ELPs is slightly lower at 33% than the male graduation rate of U.S. higher education in 4-year postsecondary institutions at 35%.

Globally, access to postsecondary education for women has been an important topic to determine whether education systems are supporting gender equality. With no statistically significant relationship between international student enrollment in U.S. postsecondary ELPs and gender, practitioners may not need to adjustment recruitment practices for gender equality in U.S. postsecondary ELPs. However with a statistically significant difference of -7.17 in international student completion rate of U.S. postsecondary ELPs for males when compared to females, practitioners may want to investigation male completion rates more closely. Practitioners may want to define the needs of male students in regards to completing U.S. postsecondary ELPs and create strategies and curricula to support those needs. Some

practitioners may even consider preferential admissions practices for males to account the disproportionate completion rates.

Becker (2011) investigated the transitions of adult limited English proficient students from ELPs to mainstream college-level content courses at a community college with cultural capital as a predicator to success. Ewert (2012) concluded attendance pattern, social integration, and academic performance in college influenced the gender gap in a cohort of higher education students. Future research would be needed to determine whether cultural capital or other factors relate to the statistically significant difference of in international student completion rates of U.S. postsecondary ELPs by gender.

These results also generate additional questions. What accounts for the difference in completion rates by gender given there is no statistically significant relationship with enrollment? Do the factors that influence international student completion of ELPs differ by gender? What contributed to the 2010 change between male and female enrollment? Are there differences between the U.S. higher education population and international student population in postsecondary ELPs that would signify different gender trends?

ELP participation by country of origin.

The exploration into international student enrollment in U.S. postsecondary ELPs by country of origin illustrates the demographics of international students in U.S. postsecondary ELPs while presenting completion rates responds to common beliefs of the demographics of students that complete ELPs and creates a basis for future research into the effectiveness of ELPs. From 2004-2008, the three leading countries of origin (South Korea, Japan, and Taiwan) for international student enrollment in U.S. postsecondary ELPs remained stable. Enrollment from Saudi Arabia and China demonstrated notable change over time bringing the countries to

have the largest amount of international student enrollment in U.S. postsecondary ELPs in 2014. However, in 2016 Saudi Arabia (-45.2%) and China (-16%) experienced a notable decrease in enrollment from the previous year (Institute of International Education, 2017). In 2017, enrollment from the top countries of origin for international students in U.S. postsecondary ELPs was down, except from Brazil with 5,650 (11.1% change from the previous year). Brazilian enrollment peaked in 2014 at 14,070. Results of a Pearson Correlation indicate no statistically significant relationship between international student enrollment in U.S. postsecondary ELPs and country of origin. Although there is no statistically significant relationship between country of origin and enrollment, the results of a one-way Welch ANOVA indicate a statistically significant difference in international student completion rates of U.S. postsecondary ELPs by country of origin. Completion rates by countries of origin varied greatly from 10% to 90% and fluctuated year over year by country. In 2014, the completion rates for international students in U.S. postsecondary ELPs from Brazil, Columbia, and Japan converged at around 60%. International student completion rates for international students from Mexico increased notably from 60% in 2013 to 87% in 2014, while completion rates for Switzerland remained stable between 91- 92% from 2004-2014.

For practitioners, these results could be useful in setting admission goals and driving instruction by country of origin. Results indicate no statistically significant relationship between international student enrollment in U.S. postsecondary ELPs and country of origin, however there were notable trends of enrollment for select countries. Understanding enrollment trends for countries of origin that account for the highest percentage of international student enrollment in U.S. postsecondary ELPs may help practitioners adjust recruitment and admission strategies. In following the trend in Saudi Arabian student enrollment in U.S. postsecondary ELPs,

practitioners could have taken advantage of the enrollment increase to 2014 and compensated for the decrease of 2016. With enrollment from the top countries of origins being down, ELP practitioners may need to work harder to maintain enrollment or expect decreased participation from some populations. Practitioners may want to set aside resources for emerging market development. In response to increased foreign competition, practitioners may want to update marketing materials to highlight the benefits of studying in the U.S. With a statistically significant difference in international student completion rates of U.S. postsecondary ELPs by country of origin, practitioners may want to investigation completion rates more closely. Given that international students from Saudi Arabia were the largest population in the U.S. postsecondary ELP in 2014, but had an average completion rate of less than 20%, practitioners may want to target the population for additional support. Practitioners may want to define the needs of students from countries of origin with low completion rates and create strategies and curricula to support those needs. Some practitioners may even consider preferential admissions practices for certain countries of origin to account the disproportionate completion rates. However, practitioners should use caution when acting on these types of observations. The results of a linear regression indicate that country of origin accounted for 1% of the variance in completion rates. Country of origin marginally accounts for completion rates and completion rates vary year over year by country. Other factors may influence completion rates to a greater extent.

A noteworthy implication of the results from this study is on theories surrounding international student mobility. McMahon's (1992) identifies economic, educational, and political factors in both the student's country of origin and the destination country influenced mobility patterns. Mazzarol and Soutar (2002) argued that social and economic factors in the

country of origin *push* students to other countries for higher education. Without a statistically significant relationship between international student enrollment in U.S. postsecondary ELPs and country of origin, future research may want to focus on a sub-construct of country of origin to identify a relationship. Results from a study by Lueg and Lueg (2015) indicated students with higher socioeconomic status were more likely to select English as the language of instruction. The socioeconomic status of students or the economics of the country of origin may be a notable sub-construct for investigation. Jones' (2013) dissertation on the effectiveness of marketing practices on international student selection of ELP may provide a more appropriate approach to exploring international student enrollment in U.S. postsecondary ELPs. China is a leading country of origin for international student enrollment in U.S. postsecondary ELP and international student enrollment in other U.S. high education programs. However, India is a leading country of origin for international student enrollment in other U.S. high education programs, but not a leading country of origin for international student enrollment in U.S. postsecondary. The differences in leading countries of origin between the groups may support Kachru's (1986) depiction of the *Concentric Circles of English* and the interplay of history on global language acquisition.

These results also generate additional questions. The populations of students from Saudi Arabia and China experienced notable fluctuations in enrollment- which countries of origin are likely to experience growth? What accounts for the difference in completion rates by country of origin given there is no statistically significance relationship with enrollment? Since country of origin accounts for 1% of the variance in completion rates- what other factors influence international student completion of U.S. postsecondary ELPs? Country of origin has several sub-constructs- could factors in the sub-construct (e.g. language, economics) be a stronger

indicator for ELP completion rate? Is the trend from 2004-2014 related to economic and/or political changes in developing and developed countries? What are some strategies to improve completion rates for international students in U.S. postsecondary ELPs and are these strategies effective across populations?

Form and Function of ELPs

The function of U.S. postsecondary ELPs can be simply described as teaching students English. However, some researchers have argued that teaching international students English perpetuates concepts of linguistic imperialism, credential markets, and cosmopolitanism. Phillipson (1992) describes the language of dominate cultural groups as minimizing the native language of other cultural groups, leading people to believe they must speak the dominate language to access education, governance, and social upward mobility. Results of the current study indicate growth in international student participation in U.S. postsecondary ELPs, which can be viewed as a product of U.S. linguistic imperialism. However if this is the case, what are the implications of the decline in the U.S. global market share in regards to U.S. imperialism? Destination location can be considered to be a minor factor related to international student enrollment in U.S. postsecondary ELPs, but has there been a shift in the value of learning English in the U.S. or the value in learning English in general.

Labaree (1997) argues that government driven and corporate supported academic standards create a credential market that ultimately perpetuates income inequalities. When international students seek an ELP certificate to gain upward mobility, it can be argued as an example of private interests driving education. If credentials are means of accessing greater income and status in a credential market, what are the implications of a relationship between completion rates with gender and county of origin? What disparities are being created and

perpetuated in a system where female and students from particular countries of origin complete ELPs at a greater rate? Is ELP curriculum for general, academic, and employment purposes at public and private institutions contributing to this construct?

Appiah (1997) promotes cosmopolitanism as a means of building cultural capital, sense of belonging, and mutual respect. Cosmopolitanism could be an empowering concept with mobility among all levels and groups. However, results from the current study indicate an inequity in completion for gender and country of origin. Cosmopolitanism can then be seen as a privilege for the elite. A positive aspect of the results of the current study can be viewed in the lack of a statistically significant relationship between international student enrollment in U.S. postsecondary ELPs with provider type, gender, and country of origin. This seems to imply equitable representation for groups by enrollment. Overall, researchers and ELP practitioners should reflect on the form and function of ELPs. What is the intention or ultimate goal in the instruction of the English language for international students and is the form or means of instruction furthering that purpose?

Limitations

There are notable limitations to the current study. The SEVIS and IIE data employed in the study did not include longitudinal data by student. Because of this enrollment and completion rates were calculated by group (e.g. gender, country of origin) and year- not cohorts of students progressing through ELPs. Conclusions made regarding ELP completion rates are reflective of general group trends and not sensitive to the individual student experience. ELP completion was examined using a percentage rate which is not a true score being capped at 100 and not representing negative numbers. Statistical analysis was used to compensate for the unequal variance and standard deviation. While the SEVIS data are based on mandatory

reporting, the IIE data are dependent on voluntary respondents to a survey. Voluntary respondents limit the data source's ability to represent the population. IIE reports enrollment data from the National Center for Education Statistics and although IIE works to maintain consistent reporting strategies and collection methods, there may be discrepancies between sources. SEVIS and IIE data have experienced category classification changes over the years due to advancements in methodology and political changes in country borders and names. This alters and at times groups the data increasing error. Lastly without an intervention, manipulation of an independent variable, or control of extraneous variables, the internal validity of the study is low and precludes any assertion of causation.

Recommendations for Future Research

Results from the current study have directed recommendations for future research activities in collecting data, creating a strategy or framework, employing varying research methods, identifying factors, responding to additional inquiries, and bridging the research into other limited English proficient (LEP) populations.

In the course of the current investigation the researcher contacted numerous organizations within the language instruction industry, consulted several repositories of data, and reviewed a variety of resources- yielding limited data on populations participating in postsecondary ELPs. Often organizations with data were reluctant to share the information given the proprietary nature of the field. However, in order to advance knowledge and practice in postsecondary language instruction, members of the industry need to collect, analyze, and disseminate data from a variety of sources.

In conducting future research into the enrollment and completion of postsecondary ELPs, the researcher would recommend beginning with a robust research strategy. There are numerous

possible related factors to the enrollment and completion of postsecondary ELPs as indicated in the concept map of this study. However, this study explored only a few factors and did not address language as a notable possible factor in international student participation in U.S. postsecondary ELPs. Following the breadth of the current exploratory study, future studies would benefit from an in depth precise investigation of factors to generate a conceptual framework and parse out factors.

The current study used quantitative research methods and national data to explore international student participation in U.S. postsecondary ELPs. While this type of investigation is a beneficial preliminary step, there are limits the conclusions that can be made. Future research would benefit from employing qualitative or mixed-method research designs to capture perceptions. Researchers could survey, interview, and/or focus group ELP students, instructors, and administrators to gather their perceptions and practices in a qualitative analysis coupled with a quantitative approach.

Additional research is needed to further examine the factors identified in the current study and to determine additional factors that relate to enrollment and completion of postsecondary ELPs. The current study identified a relationship between ELP enrollment with higher education enrollment; ELP enrollment with destination location; and ELP completion rates with gender and country of origin. These factors have notable sub-constructs which need to be investigated to understand the nature of the relationship between the variables. The current study examined higher education enrollment, destination location, ELP provider type, gender, and country of origin, however, as depicted in the concept map there are additional factors that may relate to enrollment and completion of postsecondary ELPs. These sub-constructs and

additional factors may be of greater statistical significance to enrollment and completion of postsecondary ELPs.

The current study generated numerous additional research inquiries. Given that each group is experiencing enrollment grow at different rates, what is the nature of the relationship between the international student enrollment in U.S. postsecondary ELPs, international student enrollment in other U.S. higher education programs, and all other student enrollment U.S. higher education? What is the economic impact of international student enrollment in U.S. postsecondary ELPs? What accounts for the difference in completion rates by gender given there is no statistically significance relationship with enrollment? What accounts for the difference in completion rates by country of origin given there is no statistically significance relationship with enrollment? What additional factors influence international student enrollment in and completion of postsecondary ELPs? Additionally, updated data from IIE and SEVIS is needed to determine whether current trends have continued and to identify future trends.

A last area of future research is bridging the investigation into other LEP populations. The current study purposefully selected F-1 visa international students to begin the exploration with a population that has available data and limited but sufficient previous research. However, the U.S. has a large population of undocumented citizens, resident aliens, and native LEP students. Future studies could explore lesser examined LEP populations and make comparisons between the two groups.

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